

FLIGHT

The
**AIRCRAFT
ENGINEER
&
AIRSHIPS**

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Founder and Editor : STANLEY SPOONER

A Journal devoted to the Interests, Practice, and Progress of Aerial Locomotion and Transport

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"FLIGHT" PHOTOGRAPHS

To those desirous of obtaining copies of "Flight" Photographs, these can be supplied, enlarged or otherwise upon application to Photo. Department, 36, Great Queen Street, W.C.2.

DIARY OF CURRENT AND FORTHCOMING EVENTS

Club Secretaries and others desirous of announcing the dates of important fixtures are invited to send particulars for inclusion in this list—

1928

Dec. 12-14 International Conference on Aviation, Washington, U.S.A.

Dec. 17.... R.Ae.S. Dinner to Mr. Orville Wright, at the South Kensington Science Museum

1929

May 21.... Northampton Air Pageant

July 13.... R.A.F. Display at Hendon

July 16-27 7th International Aero Exhibition, Olympia

Oct. 31.... Guggenheim Safe-Aircraft Competition Closes

CHRISTMAS HOLIDAYS.

Owing to the holidays "FLIGHT" must close for press for the issue of December 20 on December 18, and for December 27 on December 22. All communications, therefore, must arrive at this office not later than the mornings of December 18 and 22 respectively.

EDITORIAL COMMENT



WHAT must be regarded as in many respects one of the most noteworthy flights in the history of aviation came to a successful close when, on December 11, the four Supermarine "Southampton-Napier" flying boats under Group-Captain Cave-Browne-Cave arrived at Singapore after a cruise lasting 14 months, and which must have covered something like 30,000 miles all told.

Great Cruise Ended

Leaving Plymouth on October 17, 1927, the four flying-boats have completed their great cruise according to a pre-determined schedule, and although the detailed log of the later stages of the cruise has not yet become available for publication, it is gathered that no serious troubles have arisen, either in the metal hull flying-boats or in their Napier engines. During the Karachi-Singapore stage of the cruise, it was reported that as a result of the 12 days' stay at Colombo, the hulls of all four "Southampsons" collected a heavy deposit of barnacles, but other than that the metal hulls gave no trouble. And when the barnacles were removed, the take-off run of the machines, which had been greatly increased by the roughness of surface which the barnacles caused, returned to normal.

As for the Napier engines, although the official report is not yet issued, we believe we are right in stating that the same eight engines which left Catterick completed the entire cruise. The mileage of the cruise from England to Singapore, from Singapore to and around Australia and back to Singapore, totalled something like 23,000 miles. A further cruise in Eastern waters was then carried out, with visits to Sarawak, Labuan, the Philippines, Hongkong,

Indo-China, Siam, Victoria Point and Penang, which must have brought the grand total mileage up to about 30,000 miles, or 120,000 machine-miles, or 240,000 engine-miles. Looked at in another way, if it is assumed that the average cruising speed throughout the cruise was 75 m.p.h., and it is doubtful if it was more than that with headwinds, etc., the eight Napier "Lion" engines have each run something like 400 hours, or a total for the eight engines used of 3,200 engine-hours. As far as we have been able to ascertain, this was done without serious trouble. Truly, a remarkable testimony to "The engine which never lets the R.A.F. down"!

Thus, from the technical side it can truly be said that the great cruise to the Far East has been a success. The political effect cannot well be assured and summed up in a few words, but that it has been considerable is not to be doubted. And that it should have been the flying-boat type which so successfully "showed the flag" is not only a matter for gratification to a journal which, like *FLIGHT*, has for many years consistently advocated the development of the flying-boat, but is also, we think, highly significant and an excellent augury for the future of British Empire air communications. To Group-Captain Cave-Browne-Cave and the crew of the four machines, the greatest possible credit is due for having successfully accomplished a task that cannot by any means have been an easy one, and the Royal Air Force and the British Empire are proud of them. To the Supermarine and Napier firms, whose machines and engines made the cruise possible, British aviation also owes a debt of gratitude for having contributed their share towards this convincing demonstration of the high qualities of British aviation materiel.



One More Record

It is only a very short time ago that one was reluctantly compelled to admit that not a single world's record stood to the credit of Great Britain. Now we hold no less than seven world's records, and of these, six stand to the credit of the De Havilland Aircraft Company, the seventh being Flight-Lieut. Webster's speed record of 456.522 km. per hour over 100 km. in the Schneider race.

The six world's records held by the De Havilland firm are: Three speed records on the "Hound"



Farewell Dinner to Air Vice-Marshal Sir Philip Game

SIR SAMUEL HOARE, Secretary of State for Air, gave a farewell dinner at the Army and Navy Club, on December 5, to Air Vice-Marshal Sir Philip Game, K.C.B., D.S.O., Air Member for Personnel of the Air Council, on the occasion of his impending retirement. In addition to Sir Philip Game there were present the Air Council, a number of senior officers and officials of the Air Ministry, and the Air Officers Commanding, Royal Air Force, in the United Kingdom. The following are the names of those present:—Sir Philip Sassoon, Marshal of the Royal Air Force, Sir Hugh Trenchard, Air Vice-Marshal Sir John Higgins, Sir Walter Nicholson, Air Vice-Marshal Sir Ivo Vesey, Air Vice-Marshal F. R. Scarlett, Air Vice-Marshal C. L. Lambe, Air Vice-Marshal Sir John Steel, Air Vice-Marshal C. A. H. Longcroft, Air Vice-Marshal D. Munro, Air Vice-Marshal F. C. Halahan, Mr. H. W. W. McAnally, Mr. B. E. Holloway, Mr. J. A. Webster, Air Commodore H. C. T. Dowding, Air Commodore T. C. R. Higgins, Air Commodore A. E. Borton, Air Commodore E. R. Ludlow Hewitt, Air Commodore A. M. Longmore, Air Commodore C. L. N. Newall, Air Commodore I. M. Bonham-Carter, The Reverend R. E. V. Hanson, Air Commodore J. A. Chamier, Group Captain P. L. Herbert, Group Captain

with Napier Series XI engine, carrying 500 kg. and 1,000 kg. useful load. The pilot in all three flights was Capt. Broad. The other three are light 'plane records, of which the altitude record for two-seaters is held by Capt. de Havilland, the speed record over 100 km. by Mr. Alan S. Butler, and the speed record over 100 km. in the single-seater class of light aeroplane, held by Capt. Broad on the "Tiger-Moth."

We wonder if it is generally realised that the De Havilland Aircraft Company is unique in many ways, and how much of the success of the firm is due to the keen personal interest taken by every member of the staff in the welfare of the company. The chief test pilot of the firm holds four world's records. The technical director holds one, and now the chairman of the company holds one. Moreover, it seems that if ever a firm practised what it preaches it is the De Havilland Company. The chairman, the technical director, the chief engineer, and all the members of the sales department fly regularly. Wherever there is a flying meeting, the company is always well represented both by machines and personnel. And last but by no means least, the womenfolk of the company are just as keen as their men. The wife of the technical director accompanied her husband on his altitude record flight. The wife of the chairman of the company was the passenger on Friday last, when a new speed record was established. Thus it seems that the De Havilland company holds, in addition, a number of records that are not recognised by the F.A.I.!

While on the subject of records, there is a chance that yet another may be established in the not too distant future. The daily press has disclosed a good deal concerning the new attempt on the duration and distance records, although the aviation press has kept faith with the aircraft company and the Air Ministry by refraining from publishing any particulars. It seems, however, to be an open secret now that the new Fairey monoplane with Napier engine has left Northolt, and is at Cranwell, where the surface is such as to make the aerodrome particularly suitable for taking off a heavily loaded machine. Fuel consumption tests are to be carried out, and if these come up to expectations, as there is little doubt that they will, an attempt may be made when the weather conditions are suitable to beat the duration record.

N. D. K. McEwen, Group Captain P. B. Joubert de la Ferte, Group Captain A. L. Godman, Group Captain R. P. Ross and Mr. C. Ll. Bullock.

Air Commodore Chamier Retires

AIR COMMODORE J. A. CHAMIER, Director of Technical Development to the Department of Supply and Research, Air Ministry, has relinquished his commission to join Vickers, Ltd., as the Technical Director of Vickers Aircraft and the newly allied firm of Supermarine Aviation Works, Southampton.

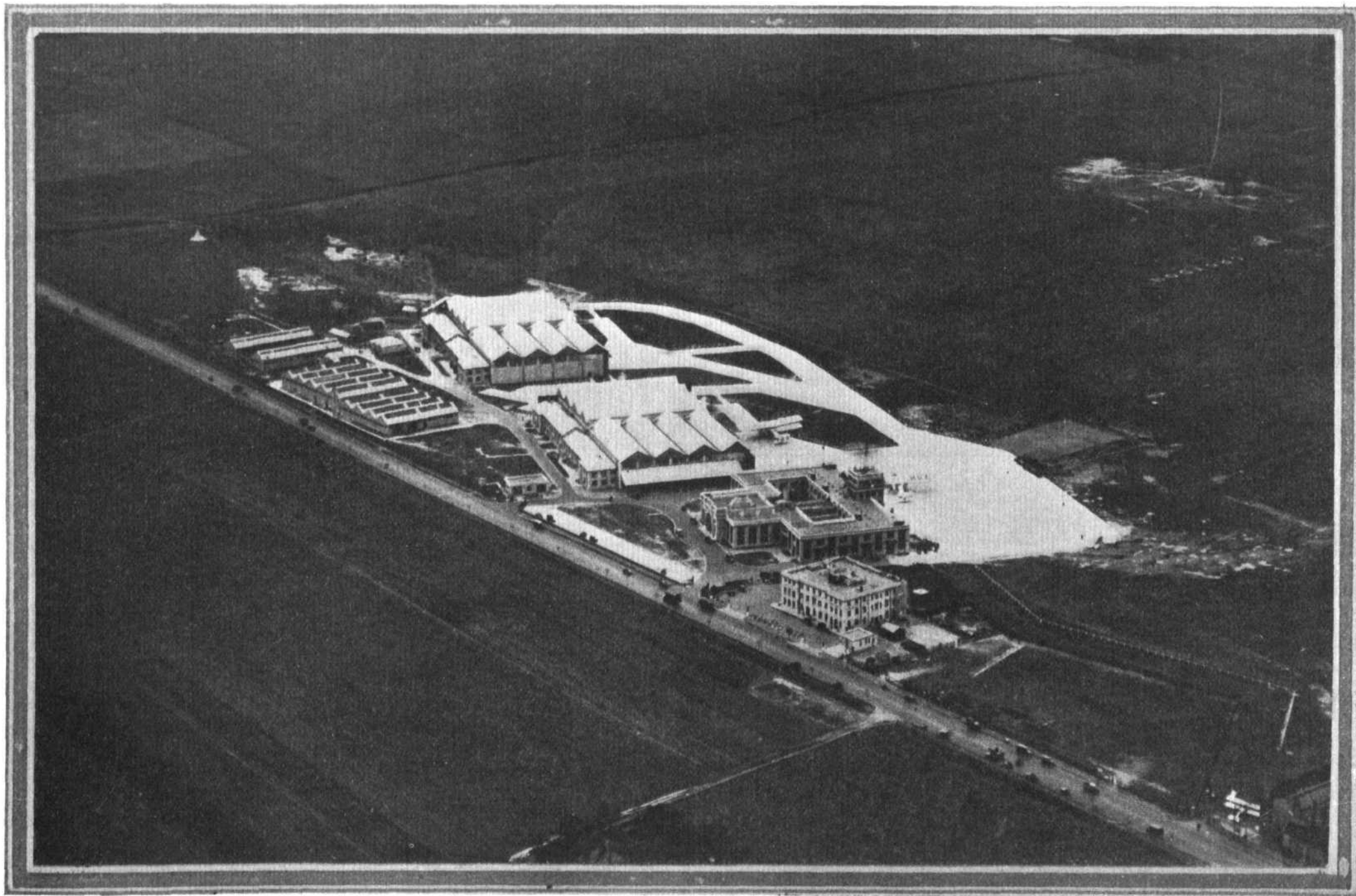
Lieut.-Col. I. A. E. Edwards Retires

THE resignation is reported of Lieut.-Col. I. A. E. Edwards, Chief Technical Adviser, Directorate of Civil Aviation. It is understood on good authority that Lieut.-Col. Edwards is joining the new company formed to carry out a scheme in civil aviation.

Reid Aircraft Co. Amalgamates

THE Curtiss Aeroplane and Motor Co., Incorporated, New York, is merging with the Reid Aircraft Co., of Montreal, which produces the Reid "Rambler" all-metal light aeroplane. The directorate is to be two-thirds Canadian and the capitalisation £1,500,000. The Reid aerodrome and factory covers 176 acres.

DECEMBER 13, 1928



THE NEW CROYDON AIRPORT: An aerial view of the new buildings at Croydon Aerodrome.

Aerofilms



THE FOKKER "F-10" MONOPLANE

An American-built Three-engined Commercial Model

ONE of the several types of Fokker commercial aircraft constructed at the Hasbrouck Heights (N.J.) factory of the Atlantic Aircraft Corporation (a subsidiary of the Fokker Aircraft Corporation of America) is the "F-10." Three of these were ordered some time back by the Western Air Express Co. It is of interest to note that these three machines were ordered under an equipment loan granted to the Western Air Express by the Guggenheim Fund for the development of a model airway between Los Angeles and San Francisco. Construction of the machines was not commenced until after Maj. C. C. Mosley, operations chief of Western Air Express, had returned from a tour of the principal European air lines. Final specifications were then drawn up and construction started—the first machine being completed, we understand, in a record time of practically three months.

The "F-10," which is fitted with three 400 h.p. Pratt and Whitney "Wasp" engines, follows Fokker practice, having a full cantilever wing of wooden construction, and steel tube fuselage. It has accommodation for 12 passengers and approximately 480 lbs. of mail or freight—in addition to two pilots, fuel, oil and accessories. With a gross weight of 11,500 lbs. it has a disposable weight of 4,950 lbs. of which 2,640 lbs. is pay load. The top speed, full load, on three engines, is 148 m.p.h. and on two engines, 122 m.p.h.

The fuselage is constructed entirely of welded seamless steel tubing, of 10225 carbon steel, the tubes being oxy-acetylene welded with all members meeting concentrically. At critical points—where concentrated loading occurs, or where a number of tubes meet—joints are reinforced by pieces of sheet metal welded to the sides of the tubes.

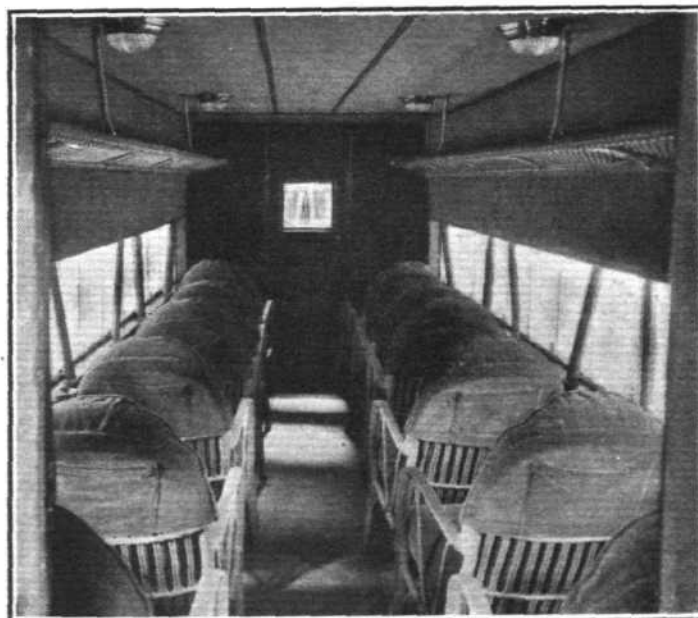
From the nose to the rear of the cabin the fuselage is built up in the form of a Warren truss, thence to the tail it is wire braced, with double piano wire looped through a tubular angle piece in the corner of the joint. With this arrangement the passengers' cabin is entirely free of bracing.

In the nose of the fuselage, immediately behind the central engine, is the pilots' cockpit, which is large and roomy. The seats are located high up with a space between them, and beneath the flooring of the cockpit—which consists of corrugated duralumin on steel tube supports—is a compartment for wireless or additional luggage. Entrance to the cockpit is gained by way of a door on the right-hand side

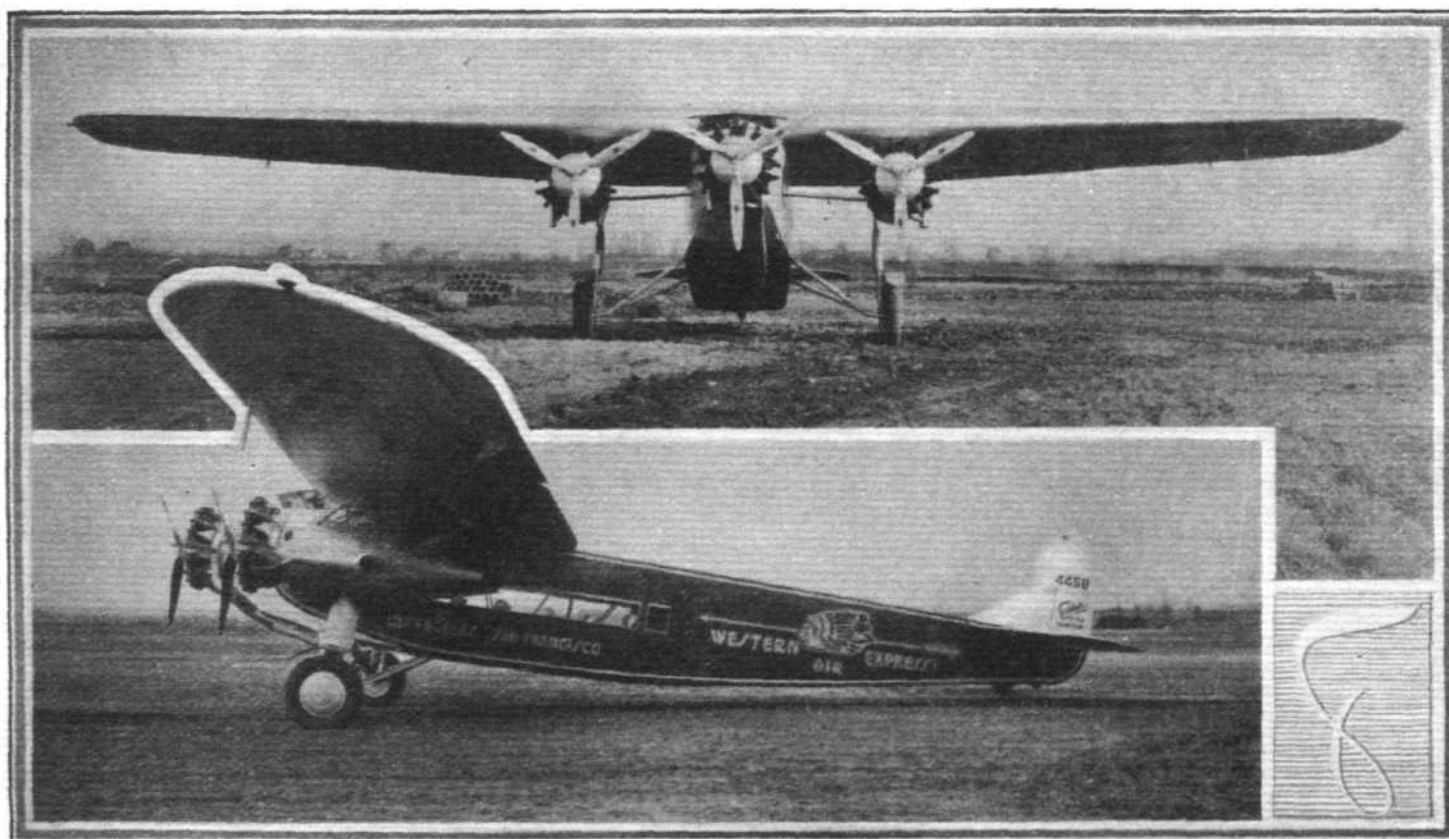
of the fuselage, while there is also a door at the rear leading into the passengers' cabin.

The pilot's control is rather interesting. Between the two seats is a single control column, hinged in the middle so that the top half may be swung over opposite either seat. It is fitted with a wheel control operating through cables which pass over pulleys at the hinge. When the hinged portion of the column is swung over to the side required, the hinge is locked, and the column operates as one. For rudder control, dual pedals are provided.

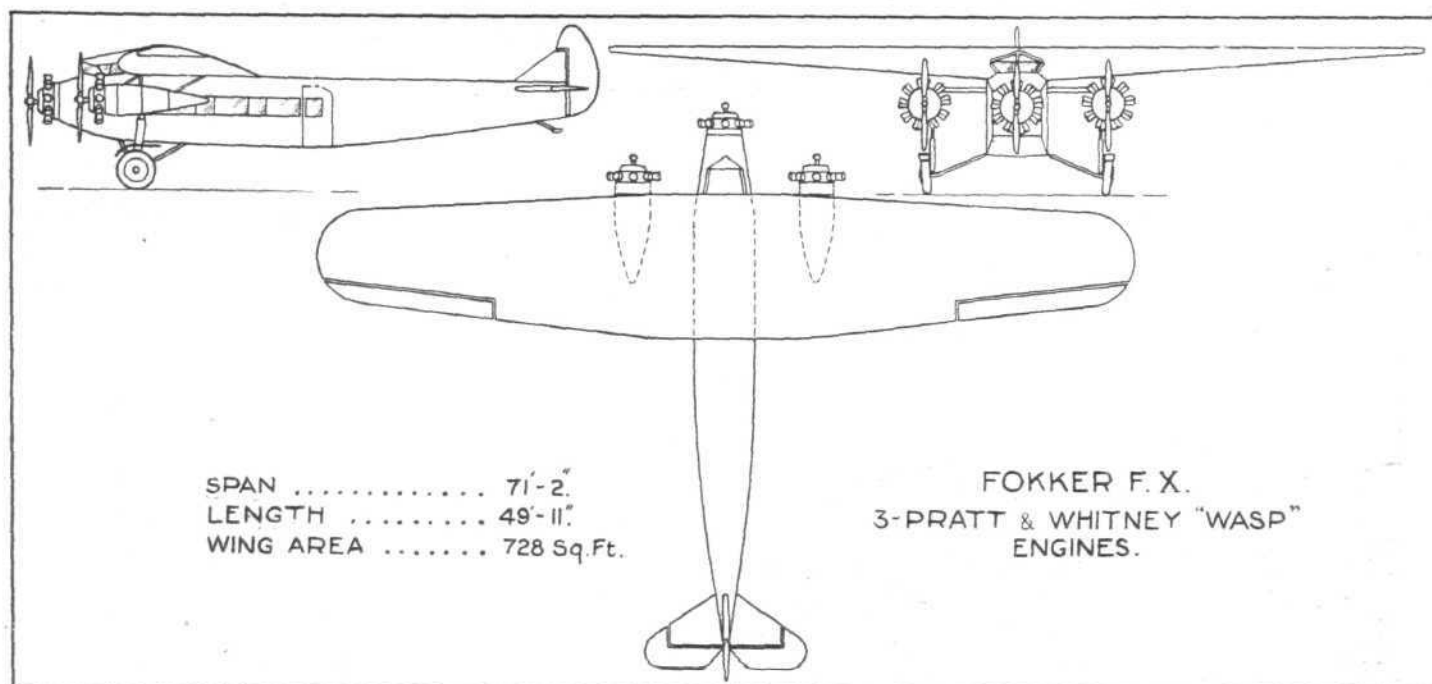
Under normal conditions the machine is controlled from the left-hand seat—which, by the way, is adjustable—and



THE FOKKER F.10 : View inside the passengers' cabin, which seats 12 passengers.



THE FOKKER F.10 : Two views of the latest American-built three-engined Fokker commercial monoplane. The engines are 410 h.p. Pratt and Whitney "Wasps."



THE FOKKER F.10 : General arrangement drawings.

for this reason all the main instruments are located on that side of the dash. The engine controls are grouped together below the centre of the instrument board. The wing engines have their instruments mounted on small panels on the inner side of the engine nacelles, below the wing, lights being provided on these panels so that the instruments may be seen at night.

The cowling of the cockpit fairings into the wing and is provided with flat, sliding, safety glass sides and roof. Excellent vision is thus obtained forward, sideways and upward.

From the cockpit to a point just aft of the wings the fuselage is formed into a large cabin, 16 ft. long, 5 ft. wide, and 6 ft. high. The 12 seats, of wicker construction heavily upholstered with grey velour, are arranged six on each side, and above each row, near the ceiling, is a narrow rack for small baggage, while in the back of each seat is a pocket for papers and such like articles.

Safety glass windows, mounted in frames so that they can slide longitudinally, extend the full length of the cabin, which with four dome lights in the ceiling, make the cabin light and cheerful both by day and by night. The whole of the cabin is elaborately fitted up, all fittings being nickel plated, and for use in cold weather an exhaust heater is connected to the cabin from the centre engine, while the walls, ceiling and floor of the cabin are padded with Balsam wood—which not only provides insulation against extreme outside temperatures, but also serves to deaden the noise of the engines.

At the rear of the cabin, on the left-hand side, is a large door giving access to the cabin through a compartment immediately behind the latter. The right-hand half of this compartment is fitted as a lavatory. Behind this again is another compartment, separated by a door, for baggage or mail.

The full cantilever wing is of standard Fokker design, of wood construction throughout and without any wire bracing. The two main spars are of the box type with laminated chord members and birch plywood webs. The ribs have plywood webs, routed for lightness (except compression members); with solid cap strips. Light plywood, glued and nailed to the framework, is employed for the wing covering. The wings are wired for the installation of navigation lights, and in addition are electrically bonded for wireless purposes. The ailerons are similar in construction to the wings and are of the mitred type, hinged to false spars in the wing. The hinges are on the upper surface of the wing and both the aileron and the wing have flat surfaces on the sides facing the gap between them, so that when the aileron is up there is a definite opening in the lower surface, increasing the drag, and when the aileron is down, the gap is closed, decreasing the drag. Horns are attached to both the upper and lower surfaces of the ailerons and connected to cables running to the cockpit.

The tail surfaces are also controlled by cables, carried inside the fuselage, while the stabiliser plane, of semi-cantilever design, is adjustable from the pilots' cockpit. Both elevators and rudder are balanced, and all tail surfaces are constructed of welded steel tubing covered with fabric. They are, in general, built up of large diameter tube forming the main structural member, to which tubular ribs of Warren truss construction are welded; the ribs are braced by another tube bent to conform with the outline of the control surface.

A divided type landing gear is employed, with axles and radius rods hinged to the bottom longerons. Vertical struts, fitted with shock absorbers, carry directly the weight of the side engines and the bulk of the wing when the machine is on the ground, so that no weight is borne by the fuselage. The shock absorbers are formed of individual endless rings of elastic cord, which can easily be replaced, and provide a long stroke under load and soft action in taxiing. Sauzedde roller-bearing wheels and brakes with 44 x 10 in. tyres are fitted; the track is 15 ft. 8 in.

The wing-engine nacelles are mounted outside the vertical landing gear strut, which forms part of the trussing of the engine mount, the latter distributing the load to the forward and rear wing spars by a frame consisting of four longerons of steel tube, welded together and braced by other tubes connecting it to the wing. There are two points of attachment on the front spar and one on the rear spar, while a ring type engine bearer is welded to the front end of this truss, and circular steel tubes welded to the bracing members form the framework for the short duralumin cowling.

The principal characteristics of the Fokker F-10 are:—

Span	.. .. .	79 ft. 3 in.
OA length	.. .. .	50 ft.
OA height	.. .. .	12 ft. 8 in.
Wing area	.. .. .	850 sq. ft.
Weight (empty)	.. .. .	7,500 lbs.
Pay load	.. .. .	2,700 lbs.
Total weight	.. .. .	12,500 lbs.
Weight per sq. ft.	.. .. .	14.7 lbs.
Weight per h.p.	.. .. .	10 lbs.
Maximum speed (3 engines)	.. .. .	145 m.p.h.
" (2 engines)	.. .. .	118 m.p.h.
Cruising speed	.. .. .	125 m.p.h. (104 m.p.h.)
Landing speed	.. .. .	55 m.p.h.
Climb sea level (3 engines)	.. .. .	1,400 ft./min.
" (2 engines)	.. .. .	640 ft./min.
Climb to 10,000 ft.	.. .. .	10 mins.
Service ceiling	.. .. .	18,000 ft.
Cruising range	.. .. .	4½ hrs. (600 miles).

Everling Quantities.

High-speed figure	.. .. .	14.8
Distance figure	.. .. .	4
Altitude figure	.. .. .	6

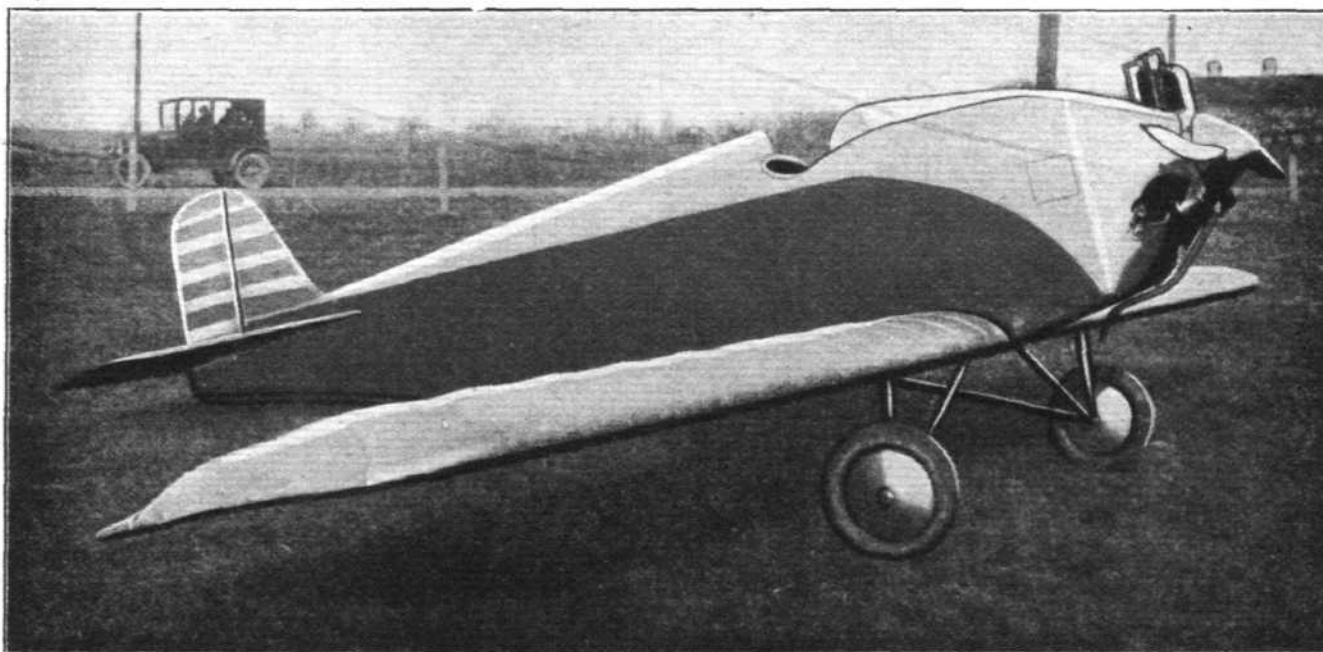
THE WILLIAMS MONOPLANE

An American Single-Seater Light 'Plane

In the spring of this year, tests were completed with the first product of the Niles Aircraft Corp., of Niles, Mich.—a small single-seater low-wing monoplane fitted with a 30-h.p., 3-cyl. Anzani air-cooled radial engine. These tests being in every way successful, the firm decided, upon receipt of the U.S. Department of Commerce Approved Type Certificate, to put the machine into quantity production.

of the rudder. The latter is of welded steel tubing with a sheet metal cowling over the wheel. Thus the wheel is steerable with the rudder, besides being faired in.

The rectangular fuselage is constructed of welded steel tubing, and no wire bracing is employed, the entire structure being built up in the form of a Warren truss. It is of good streamline shape, the airscrew being provided with a spinner



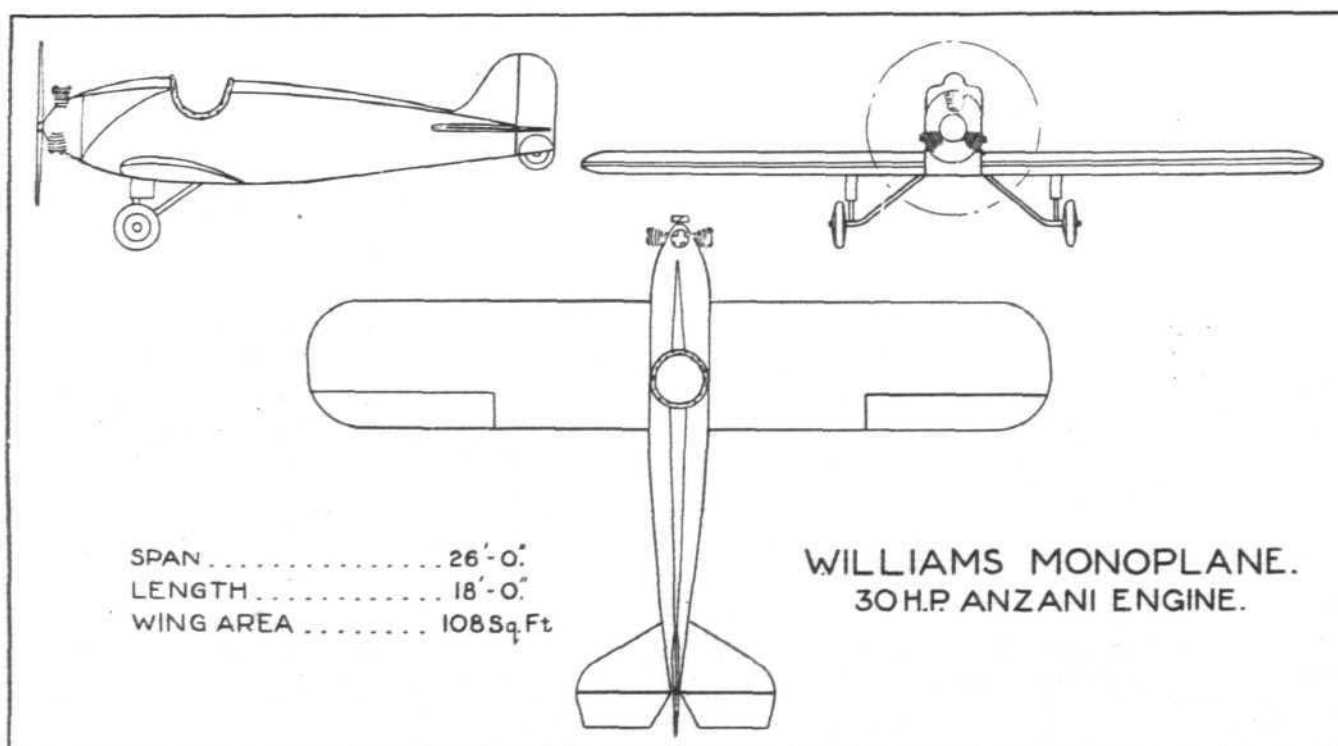
THE WILLIAMS MONOPLANE : An American single-seater, low-wing light 'plane, fitted with a 30-h.p. Anzani.

It is stated that during its trials this machine took off in 50 ft. and climbed at the rate of about 1,000 ft. per minute. The landing speed was 25 m.p.h., although it was designed for 30 m.p.h. Its estimated top speed is 85 m.p.h., while it has a cruising radius of 360 miles.

As regards design and construction, the Williams monoplane more or less follows conventional practice, except for the somewhat unusual feature of the employment of a small wheel in place of the usual tail skid. Here a small wire wheel, fitted with a brake band at its rim, is mounted in the bottom

which fairs in with the lines of the fuselage, a wood turtledeck on top of the fuselage, from cockpit to tail, completing the streamline form; in addition, there is a fairing extending along the top of the fuselage, in line with the pilot's head, from the nose and merging into the rudder, broken only by the opening for the cockpit.

The cockpit is very wide and roomy, from which excellent vision is afforded in all directions except directly below the pilot, where, of course, the wing obstructs the view. Conventional stick and rudder pedal control is fitted, and behind



THE WILLIAMS MONOPLANE : General arrangement drawings.

the engine, above the pilot's feet, is the main fuel tank of 7½ gals. capacity, shaped to act as part of the fairing above the fuselage.

Of full cantilever construction, the wings are mounted at the bottom of the fuselage, and the Gottingen 387 section is employed, giving a spar depth of 8 in. The spars are built up in box form of spruce with 2-ply mahogany sides. The ribs are built-up of spruce strips into a Warren truss with birch plywood gussets at the joints. Drag bracing consists of welded steel tubes for compression members, and piano-wire diagonal bracing.

A "non-axle" type of landing gear is employed, with its members hinging about the lower longerons of the fuselage and the vertical compression, or absorber, member attached to the wing spar. The wheel track is 8 ft., and with the

machine in flying position the airscrew clears the ground by 14 in.

The main characteristics of the Williams monoplane are:—

Span	26 ft. 0 in.
Overall length	18 ft. 0 in.
Overall height	6 ft. 6 in.
Chord	4 ft. 6 in.
Wing area	108 sq. ft.
Weight, empty	440 lbs.
Weight, loaded	530 lbs.
Speed range	30—85 m.p.h.
Climb (ground level)	925 ft./min.
Ceiling	19,000 ft.
Cruising range	360 miles.

THE ROYAL AERO CLUB OF THE U.K.

OFFICIAL NOTICES TO MEMBERS

Christmas Closing.—The Club will be entirely closed from 11 p.m. on Monday, December 24, 1928, to 8 a.m. on Thursday, December 27, 1928.

The Club will also be closed on Saturday, December 29, 1928, from 3 p.m. to midnight on the occasion of the club staff Christmas party.—THE HOUSE COMMITTEE.

Technical Committee.—The Technical Committee met on Monday, December 3, 1928, at 5 p.m. Present: Lieut.-Col. M. O'Gorman, C.B.; Major J. S. Buchanan, O.B.E.; R. S. Capon; Sqdn.-Ldr. T. H. England, D.S.C.; W. O. Manning; Major R. H. Mayo, O.B.E.; Lieut.-Col. H. W. S. Outram, C.B.E.; Sqdn.-Ldr. M. E. A. Wright, A.F.C., and Harold E. Perrin, Secretary.

The Committee considered the following subjects:—Regulations for High-speed Records, Automatic Timing for High-speed Records, Temperature Compensated Barograph for Height Records, Marking of Barograph Charts.

World's Records.—The Royal Aero Club has been notified by the Fédération Aéronautique Internationale that the following World's Records have been granted:—

Class B : Airships

Distance: (Germany).—Dr. Eckener, Lakehurst, United States—Friedrichshafen, Germany, October 29, 30, 31, November 1, 1928. S.Z. 127. "Graf Zeppelin," 5-450/550 h.p. Maybach, 6,384-500 kms.

Class C : Aeroplanes

Useful Load Transported, 2,000 Kgs.

Speed over 100 kms.: (France).—Paillard and Camplan, Le Bourget—Gondreville, November 23, 1928. "Bernard" 190T monoplane, 600 h.p. Hispano-Suiza, 223-546 kms.

Light Aeroplanes

Third Category.—*Single-seater.*—(Weight empty from above 200 kgs. to 350 kgs. inclusive).

Distance in a Straight Line: (Czecho-Slovakia).—Capt. A. Vichereck, Prague—Bednodemjanovsk, Russia, October 5, 1928. "Avia" monoplane, 60 h.p. Walter, 2,011 kms.

Early Flights.—The Special Committee appointed by the Royal Aero Club to investigate the claims of British subjects to early aeroplane performances in the British Isles, met on Thursday, December 6, at the Royal Aero Club, when there were present The Right. Hon. Lord Gorell, in the Chair; Capt. G. de Havilland; Lieut.-Col. W. Lockwood Marsh; and H. E. Perrin, Secretary.

The Committee took evidence from the following claimants who appeared before them:—Lieut.-Col. J. T. C. Moore-Brabazon, M.P., Mr. A. V. Roe and Mr. A. H. Phillips.

Offices: THE ROYAL AERO CLUB,

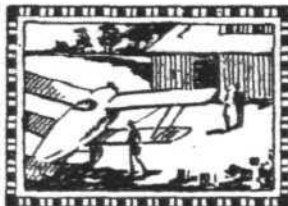
3, CLIFFORD STREET, LONDON, W.1.

H. E. PERRIN, Secretary.



ADAPTABILITY! This picture of four Fairey III.F biplanes is an interesting "study in noses," and also illustrates the adaptability of this machine as regards power plant. Each machine is fitted with a different engine, viz.:—(From left to right) Lorraine Type Ed. 12; Bristol "Jupiter," Series VIII; Napier "Lion XIA"; and Rolls-Royce F.XI.

PRIVATE FLYING



A Section of **FLIGHT** in the Interests of the Private Owner, Owner-Pilot, and Club Member

NEW WORLD'S RECORD FOR GIPSY-MOTH 119.84 M.P.H.

A GIPSY-MOTH light aeroplane created a new world's speed record on December 7 for two-seater light aeroplanes flying a



["FLIGHT" Photograph]

Mr. A. S. Butler, Chairman of the De Havilland Aircraft Co., Ltd., who made a new world's speed record in his Gipsy-Moth for the 100 km. closed circuit. His speed was 119.84 m.p.h. Mrs. Butler was his passenger.

100-km. closed circuit. Its speed was 192.864 k.p.h., which is 119.84 m.p.h. The pilot was Mr. A. S. Butler,

Chairman of the De Havilland Aircraft Co., Ltd., and a private owner-pilot. His passenger was his wife, Mrs. A. S. Butler. The course was from Stag Lane Aerodrome, Edgware, to Twyford, near Reading, and back, equalling 62.14 miles. Representatives of the Royal Aero Club watched the flight officially and the figures obtained will, as usual, be subject to confirmation.

Weather conditions at the time were unfavourable, low mist prevailing, and but for this it is anticipated that four or five miles per hour would have been added to the speed. It is interesting to note that Mr. Butler flew his own ordinary touring Gipsy-Moth. The previous record in the same class, which is that of two-seaters with an empty weight of not more than 400 kilos (880 lbs.), was set up by Herr P. W. Bäumer and Herr F. Puls on a *Bäumer* light monoplane fitted with a 60-h.p. Wright engine. This was on July 10, 1927, at Hamburg-Fuhlsbüttel, and the speed reached over the 100-km. course was 191.959 k.p.h., which equals 119.2 m.p.h. Thus, the speed difference in favour of the Gipsy-Moth is under a mile per hour. In this connection it should be pointed out that it is only with large aircraft where a new speed record must be at least 5 miles per hour faster than the old record.

Incidentally, five days after making his record Paul Bäumer lost his life unfortunately, whilst testing a Rohrbach machine, built for the Turkish Government. He was flying over the Sound in the vicinity of Copenhagen when the machine fell into the sea and sank. During the war Bäumer was credited with 44 Allied machines. In the years previous to his death he started a small aircraft factory at Hamburg and produced such machines as the *Sausewind* and *Alsterkind*.

This new world's record makes the seventh now held by Great Britain. Six of the seven have been won by the De Havilland Aircraft Co., Ltd., and of that number two go to the credit of two of the company's directors, namely, Mr. A. S. Butler and Captain Geoffrey de Havilland, both private owner-pilots. Incidentally, whilst one is referring to these flying qualifications it is interesting to observe that everyone connected with the sales department of that company is a pilot and is always flying.

Capt. de Havilland set up a world's altitude record for two-seater light aeroplanes on July 25 of this year, when he reached 21,000 ft. in a Gipsy-Moth, with Mrs. de Havilland as passenger. An attempt to beat this by Lady Heath on October 4 failed by 2,200 ft.

Capt. H. Broad, the test pilot, made an unofficial 24 hours' duration record for light aeroplanes of the two-seater class on August 16-17 this year with a Gipsy-Moth. The last King's Cup Race was also won with a Gipsy-Moth piloted by Capt. W. L. Hope.

REPORTS ON AERODROME SCHEMES

WE are glad to report further interest of a few towns in the question of municipal aerodromes.

Carlisle submitted details of various sites to the Air Ministry, which has now selected one at Kingstown, two miles north of the city on the direct road to Glasgow. The site is owned by Sir James Watt, and negotiations for its purchase are now proceeding. The geographical advantage of Carlisle for aircraft passing between England and Scotland speaks for itself.

Hereford's possibilities as an air station for traffic flying between the North of England and South Wales and the West country were discussed by the Hereford Chamber of Commerce recently. The Chairman, Mr. G. W. Russell, said it behoved Hereford to be in the van, and see that the claims of the city were furthered. Mr. Storr-Barber said that it would be of great advantage to the city to become an air station, and it might be that the promotion of such an establishment might lead to the coming of a factory. The

Chairman then proposed that they inquire what steps other towns were taking, and then do something direct. It is stated that there are many places in the vicinity that could be adapted to the purpose.

Glasgow Corporation has applied to the Air Ministry for a grant in connection with its proposed aerodrome. This is hardly likely to be favoured, however. The Air Ministry is continually placing its experts at the service of towns who need guidance in the choice of sites, and is prepared to assist in any other way desired, except financially. Sir Samuel Hoare and Sir Sefton Brancker have made this clear on more than one occasion. If one town received financial grants then naturally every town would claim equal favour.

Birmingham City Council was to consider its own aerodrome question at a meeting on December 11.

Exeter has a private aerodrome owned by Messrs. Maudes' Motor Mart. It is 60 acres in extent and located at Stoke

Canon on the outskirts of Exeter. Private owners are invited to make use of it when flying to the West, but it is suggested that warning of one's arrival should be given by wire or otherwise, and then a D.H. "Moth" owned by the Company, who are agents for them, will, if possible, be flying over the field to indicate it. Incidentally, it should be noted that another field is shortly to come into use for the

same Company, and will then supersede the present one. This change to another district will take place between now and January.

Incidentally, a contract for a large aerodrome with hangars, workshops, stores and quarters, at Gosport, involving an expenditure of £130,000, is in the hands of Messrs. John Laing & Son, Ltd., Mill Hill, N.W. 7.

BLACKBURN "BLUEBIRD" SEAPLANE TOUR

A LIGHT seaplane flight of particular interest in view of our plea last week for more seaplane flying is that just completed by Col. The Master of Sempill, Chairman of the Royal Aeronautical Society. He flew the North Sea in his Blackburn "Bluebird" seaplane to visit the Berlin Aero Show in October, and on December 8 he returned, after an adventurous flight from Berlin. When he set out on December 4 from a lake near Berlin, where the seaplane had been moored for two months, a dense fog prevailed which had stopped the regular air lines. Flying very low, he covered between 130 and 140 miles, over the River Elbe, of the 170 miles to Hamburg and then weather reduced visibility to such limits that there was a danger of colliding with craft on the river. So he landed in the river and anchored there, isolated for three hours. Then he went ashore and remained the night at a farmhouse.

The following day fog was still prevalent but Hamburg was safely reached, where the harbour officials took care of the seaplane. Wilhelmshaven was the next stage as a landing was enforced by further bad weather and darkness. He alighted close to a naval boat and was the guest of the Commander-in-Chief of Wilhelmshaven. Two nights were spent there owing to the fog, then, on December 7, Amsterdam was the next stage, flown at a ground speed of under 30 m.p.h.

owing to the strong head winds, although the air speed was over 70 m.p.h. A landing was safely effected on the Zuider Zee en route, for petrol, and then came Amsterdam.

The next day, December 8, he left Amsterdam in better weather and flew across to Felixstowe in 4 hours, the North Sea journey being 120 miles. Finally, he flew on to the Welsh Harp at Hendon.

Since last July, the Blackburn "Bluebird" used by the Master of Sempill has been moored out continuously. It was moored all the time during gales on the Wannsee in Germany which wrecked a Rohrbach "Romar" flying-boat.

Last summer he collected the seaplane from the River Humber at Brough, near Hull, where the works and seaplane station of the Blackburn Aeroplane Co. are situated.

He flew it down to the Welsh Harp, Hendon, in 4½ hours, having followed the coast all the way down to the Thames; quite a good performance for a machine built for comfort and economy rather than speed. The British Motor Boat Club was holding a Race Meeting the same day at the Welsh Harp and Colonel Sempill flew the "Bluebird" in a race with Mr. J. H. Shillan in "Tiny," one of the fastest hydroplanes, the "Bluebird" completing two laps of the course just before the motor-boat covered one.

LIGHT 'PLANE CLUBS

London Aeroplane Club, Stag Lane, Edgware. Sec., H. E. Perrin, 3, Clifford Street, London, W.1.
Bristol and Wessex Aeroplane Club, Filton, Gloucester. Secretary, Major G. S. Cooper, Filton Aerodrome, Patchway.
Cinque Ports Flying Club, Lympne, Hythe. Hon. Secretary, R. Dallas Brett, 114, High Street, Hythe, Kent.
Hampshire Aero Club, Hamble, Southampton. Secretary, H. J. Harrington, Hamble, Southampton.
Lancashire Aero Club, Woodford, Lancs. Secretary, F. W. Atherton, Woodford Aerodrome, Cheshire.
Liverpool and District Aero Club, Hooton, Cheshire. Hon. Secretary, Capt. Ellis, Hooton Aerodrome.
Midland Aero Club, Castle Bromwich, Birmingham. Secretary, Major Gilbert Dennison, 22, Villa Road, Handsworth, Birmingham.

Newcastle-on-Tyne Aero Club, Cramlington, Northumberland. Secretary, J. T. Dodds, Cramlington Aerodrome, Northumberland.
Norfolk and Norwich Aero Club, Mousehold, Norwich. Secretary, G. McEwen, The Aerodrome, Mousehold, Norwich.
Nottingham Aero Club, Hucknall, Nottingham. Hon. Secretary, Cecil R. Sands, A.C.A., Imperial Buildings, Victoria St., Nottingham.
The Scottish Flying Club, 101, St. Vincent Street, Glasgow. Secretary, Harry W. Smith.
Southern Aero Club, Shoreham, Sussex. Secretary, C. A. Boucher, Shoreham Aerodrome, Sussex.
Suffolk Aeroplane Club, Ipswich. Secretary, Maj. P. L. Holmes, The Aerodrome, Hadleigh, Suffolk.
Yorkshire Aeroplane Club, Sherburn-in-Elmet, Yorks. Secretary, Lieut.-Col. Walker, The Aerodrome, Sherburn-in-Elmet.

LONDON AEROPLANE CLUB

REPORT for week ending December 9.—Instructors: Captain V. H. Baker, M.C., A.F.C. Captain F. R. Matthews. Ground engineer: C. Humphreys. The following machines were in commission during the week:—G-EBMP and G-EBXS. Total flying time for the week: 22 hrs. 55 mins.

Dual instruction: 16 members received dual instruction during the week, the time being 11 hrs. 5 mins.

Solo flying: 13 members flew solo during the week, the time being 11 hrs. 50 mins.

J. M. Gittins completed his cross-country flights and altitude test for his "B" Licence.

Christmas closing.—Members are notified that the club will close down for the Christmas holidays on Tuesday evening, December 23, 1928, and re-open on Tuesday, January 1, 1929.

TOTAL FLYING TIME FOR THE MONTH OF NOVEMBER

	Flights.	Hrs.	Mins.
Dual instruction	125	52	5
Solo flying	114	46	50
Passenger flights	10	3	30
Test flights	56	8	20
Total	305	110	45

BRISTOL & WESSEX AEROPLANE CLUB, LTD.

REPORT for the three weeks ending Saturday, December 8.—Pilot instructor: E. B. W. Bartlett. Ground engineer: A. W. Webb. Machines in commission: 2, G-EBTV and G-EBYH. Flying time: 29 hrs. 55 mins. Pupils under instruction: (6), 10 hrs. 45 mins. Soloists under instruction: (1) 1 hr. 55 mins. "A" pilots flying: (9), 14 hrs. 55 mins. Passengers carried (4), 45 mins. Test flights: (17), 1 hr. 35 mins.

The beginning of December has been a little more cheerful, the gales having subsided, though fog and mist have taken their place to curtail flying. Mr. Hall flew to Southampton and back on the 7th, having a somewhat unpleasant return owing to local mist, which he successfully negotiated. On the 1st a Bristol football player who had lost his train rang us up, and we flew him to Cardiff, landing him on the racecourse close to the football field in time for his game.

We were most unfortunately deprived of the services of our flying instructor from November 27 until December 4, owing to illness, but Mr. J. E. Tratman

and Mr. E. V. Culverwell most kindly came to our assistance and carried out all the instruction during that period, for which we are greatly indebted to them.

Telephone No. and Telegraphic address: FULTON 53.

We suggest that the above would be a useful addition to the Club Headings.

CINQUE PORTS FLYING CLUB

REPORT for week ending December 8.—Pilot instructor: Major H. G. Travers, D.S.C. Ground engineer: Mr. R. H. Wynne. Machine: D.H. Moth N.N. Total flying time for week: 14 hrs. 10 mins.

Dual instruction: Mr. Clemetson, 1 hr.; Mr. Hamilton, 30 mins.; Mr. Douglas, 30 mins.; Mr. Worsell, 45 mins.; Mr. Evernden, 15 mins.; Mr. Wanliss, 30 mins.; Lt.-Cmdr. Gubbins, R.N., 30 mins.; Mr. Payn, 2 hrs. 15 mins.; Mr. Sargent, 15 mins. Total, 9 members, 6 hrs. 30 mins.

Soloists under instruction: Mr. Hamilton, 1 hr. 45 mins.; Mr. Tomkins, 1 hr.; Mr. Martin, 45 mins.; Mr. Worsell, 1 hr. 45 mins.; Mr. Payn, 1 hr. 30 mins.; Mr. Sargent, 30 mins. Total, 6 members, 7 hrs. 15 mins.

"A" pilots: Mr. Douglas, 15 mins. Test flights: 10 mins.

The weather was far better this week and flying took place every day.

On December 3, Mr. Hamilton, of the R.A., who is taking a course at the Small Arms School, Hythe, did his first solo, in excellent style, and he was followed on December 6 by Mr. Armstrong Payn, of Deal, who also put up a good performance. The club congratulates these members.

On Saturday, December 8, we were glad to receive a visit from Col. Strange in a Mark 3 Cirrus "Spartan." The machine was examined with great interest by the members and appears to be a most ingenious and efficient design. We hope to see more of Col. Strange and the "Spartan" in the near future.

It should be pointed out that the club will be open throughout the Christmas holiday, with the exception of Christmas Day, and it is hoped that members will take advantage of this opportunity to obtain their "A" licences.

HAMPSHIRE AEROPLANE CLUB

REPORT for week ending November 30.—Pilot Instructors: Flight-Lieut. F. A. Swaffer, M.B.E., and Mr. W. H. Dudley. Ground engineers: Mr. E. Lenny and Mr. J. Elliott. Aircraft: D.H. 60 Moths, G-EBOI and G-EBOH. Flying time for the week: 12 hrs. 35 mins. Pupils under instruction: (11), 6 hrs. 45 mins. Soloists: (2), 2 hrs. 25 mins. "A" Pilots: (4) 2 hrs. 45 mins. Tests: (5), 40 mins.

On Wednesday last we were flying for the first time for 8 days, our inactivity being solely due to bad weather.

Flight-Lieut. Swoffer is away at present undergoing his annual training and so all instructional work at present falls on Mr. Dudley.

On Wednesday last Sir Alan Cobham visited Bournemouth and he was met by members of the Committee of our Bournemouth Branch, who entertained Sir Alan to lunch and generally took charge of affairs.

Month ended November 30. Flying time for the month, 102 hrs. 25 mins. Dual: 64 hrs. Solo, 12 hrs. "A" pilots, 20 hrs. Instructors' solo, 6 hrs. 25 hrs. Passengers, 1 hr. 30 mins.

REPORT for week ending December 7.—Pilot instructors: Flight-Lieut. F. A. Swoffer, M.B.E., and Mr. W. H. Dudley. Ground engineers: Mr. E. Lenny and Mr. J. Elliott. Aircraft: D.H. 60 Moths, G-EBOI and G-EBOH. Flying time for the week: 8 hrs. 40 mins. Pupils under instruction: (9), 4 hr. 30 mins. "A" pilots: (7), 3 hrs. 5 mins. Tests: (5) 1 hr. 5 mins.

The chief item of interest to report this week is the first annual dinner of our Bournemouth Branch, which was held at the Royal Bath Hotel, Bournemouth, on Monday last. Sir Sefton Branker, Sir James Hosker, the Mayor of Bournemouth and Alderman Thwaites were among the distinguished visitors present. It is gratifying to look back upon the progress made by our Bournemouth Branch since its inception in the spring of this year. The sending over of a machine once or twice a week has promoted such keenness that it is confidently expected that next year an aeroplane and an instructor will be permanently installed. Mr. Graham Gibbs and his committee have done a tremendous amount of spade work and they hope before long to acquire an aerodrome of their own.

We were particularly pleased to see our indefatigable D.C.A. at the dinner, the more so as he had to be in Canterbury the following morning for the enthronement of the Archbishop and the weather was too foggy for flying. Not to be outdone, one of the Bournemouth members, Mr. H. S. Knight, placed his car at Sir Sefton Branker's disposal and drove through the night, arriving at Canterbury at 7 a.m. He returned to Bournemouth at 7 p.m. having driven a distance of 347 miles without sleep and through a considerable amount of fog. We consider this not at all a bad show after a club dinner.

We regret to end on a note of sadness. We have to report the death in a nursing home of our oldest flying member, Mr. A. M. Reuther.

Mr. Reuther was over 70 years of age, but greatly preferred being in the air to on the ground. Although living at Bournemouth he frequently made the arduous journey by train, tram and bus to Hamble, leaving home at 7 a.m. in order that he might fly in the weekly machine leaving Hamble for Bournemouth. His keenness might well be emulated by a host of younger men.

LANCASHIRE AERO CLUB

REPORT for week ending December 8.—Flying time: 21 hrs. 25 mins. Instruction: (9), 5 hrs. 5 mins. Solo flights: (9), 3 hrs. 30 mins. Passenger flights: (11), 10 hrs. 55 mins. Tests: (13), 2 hrs. 5 mins.

Instruction (with Mr. Hall): Cohen, Davies, R. G. Russell, Goss, Dewhurst, Whitehouse, Foote, Kay, Eckersley. Machines in commission: XD, PH, QL, MQ. Soloists (under instruction): Kay, Eckersley. Pilots: Michelson, Hall, R.F., Hardy, Weale, Mills, Lacayo, Harrison.

Passengers (with Mr. Hall): R. F. Cock, Kay. (With Mr. Lacayo): Goss (With Mr. Crosthwaite): A. Benson. (With Mr. Gort): Kelly. (With Mr. Chapman): Bartram. (With Mr. Cantrill): Miss Mercer, Miss Knight and Hackett.

At last we have got all our machines in commission once more. The new undercarriage on the Avian QL is proving most satisfactory, and the chief instructor reports that he can now almost go to sleep while giving landing practice.

The week's flying has been chiefly remarkable for the number of cross-country flights, and the number of forced landings. While the weather has on the whole been good there has been a nasty haze which made it very easy to lose sight of the aerodrome. On one day Mr. Lacayo and Mr. Kay both lost themselves within a few miles of the aerodrome. Mr. Lacayo returned in safety, after landing at Knutsford to enquire the way. Mr. Kay flew an hour and a half in the endeavour to discover his whereabouts and finally landed near Shrewsbury some 70 miles away. The machine was brought back by Mr. Hall the following day. Mr. Gort on a cross-country to Hooton, lost himself but managed to get down safely at Sealand. Mr. Cantrill lost his prop through stalling at 1,200 ft. and owing to the bitterly cold weather was unable to restart it by diving. He effected a safe landing about a mile from the aerodrome. He was very cross because his staff did not come to his assistance for about an hour and the position was not improved by the explanation that as he had a charming lady passenger on board they thought there was no hurry!

Owing to the illness of their ground engineer, Mr. Howard Pixton, the Liverpool Club found it impossible to do any flying as there was no one to sign their machines out. They appealed to the Lancs. Aero Club for assistance, and to help them out of their difficulty Mr. Jack Chapman, the Lancashire

Aero Club's ground engineer (engines) who obtained his "A" licence with the club has been flying over to Hooton in the morning, whenever the weather was suitable, with Mr. Bartram, the rigger, as passenger. After examining and signing out the machines they have returned to Woodford by air, so that both clubs have been kept going.

LIVERPOOL & DISTRICT AERO CLUB

REPORT for week ending December 1, 1928.—Machines in commission: WK, XX, (Avro Avians). Machine in reserve, XY. Instructor, Mr. J. B. Allen; ground engineer, Mr. H. Pixton. Total flying time, 8 hrs. Dual, 13 pupils totalled 6 hrs. Soloists, three pupils totalled 45 mins. "A" pilots, four pilots totalled 1 hr. 5 mins. One passenger flight of 30 mins. Two test flights totalled 10 mins.

Gales and rain have again curtailed our flying. To add to our troubles, Mr. Pixton is laid up with a severe attack of flu and neuritis. We hope, however, to have him back to duty during the course of next week. We also regret to report that Mr. Allen is suffering from quinsy, which will keep him on the sick list for a few days.

On Saturday last some careless oaf mislaid the key of the "wine cellar," causing great inconvenience and a broken door. Altogether a black week.

REPORT for week ending December 8.—Machines in commission: WK, XX, and XY, Avro Avians. Instructors: Mr. J. B. Allen, Flight-Lieut. Sullock (Hon. Instructor). Ground engineer: Mr. B. R. Nutter is acting as ground engineer during Mr. Pixton's indisposition.

Total flying time, 11 hrs. 40 mins. Instruction with Mr. Allen: 9 pupils totalled 4 hrs. 30 mins. Instruction with Mr. Sullock: 9 pupils totalled 3 hrs. 40 mins. Soloists (under instruction): 4 pupils totalled 1 hr. 50 mins. Three "A" Pilots totalled 1 hr. One passenger flight of 15 mins. Five test flights totalled 25 mins.

Mr. Sullock, who is kind enough to take a busman's holiday by acting as our Honorary Instructor, has given us every minute of his spare time whilst Mr. Allen has been indisposed, with the result that our flying time is excellent considering the unfavourable weather. We are pleased to report that Mr. Allen has now recovered and started his duties again on Saturday. Mr. Pixton is still on the sick list. We have been fortunate, however, in securing the services of Mr. Nutter as ground engineer.

Owing to indisposition of staff, the club will be closed down until the 27th inst., with the exception of week-ends, when flying will take place with Mr. Sullock in charge. Saturdays, 2 p.m. to dusk: Sundays, 11 a.m. to dusk.

We really doubt if Mr. Allen should have his sick leave, as he was so full of pep and vim on his return to work on Saturday that he quite swept Mr. Barber off his feet. He did this with the tail plane of XX when turning round—Mr. Barber executed a graceful parabola and a tail first landing, and Mr. Nutter skillfully repaired the leading edge of the plane on Sunday morning, incidentally demonstrating that King Dick spanners make quite efficient gluing cramps.

We were delighted to read of Capt. Stack's latest distinction in the Lancashire Club's December "Elevators" and thank the editor for making the matter (as Milton Hayes would say) quite clear!

MIDLAND AERO CLUB

REPORT for week ending December 8.—The total flying time, 16 hrs. 5 mins. Dual, 5 hrs.; solo 9 hrs. 50 mins.; passenger, 50 mins.; test, 25 mins.

The following members were given dual instruction by Flight-Lieut. T. Rose, D.F.C., and Mr. W. H. Sutcliffe:—O. L. Richards, T. W. Wild, J. A. Ridsdale, W. M. Morris, J. K. Morton, C. W. R. Glesson, W. L. Handley, C. Blakeway, J. B. Briggs, H. Beamish, Mrs. Leigh Fermor.

"A" Pilots: H. J. Willis, H. Evershed, C. W. Fellows, S. H. Smith, R. L. Jackson.

Soloists: C. W. R. Glesson, J. K. Morton, W. L. Handley, M. C. Wilks. Passengers: J. G. Hicks, R. Aspinall, J. E. Hicks.

Mr. C. W. R. Glesson made a successful first solo. Messrs. C. W. R. Glesson and M. C. Wilks passed the flying tests for their "A" Licences.

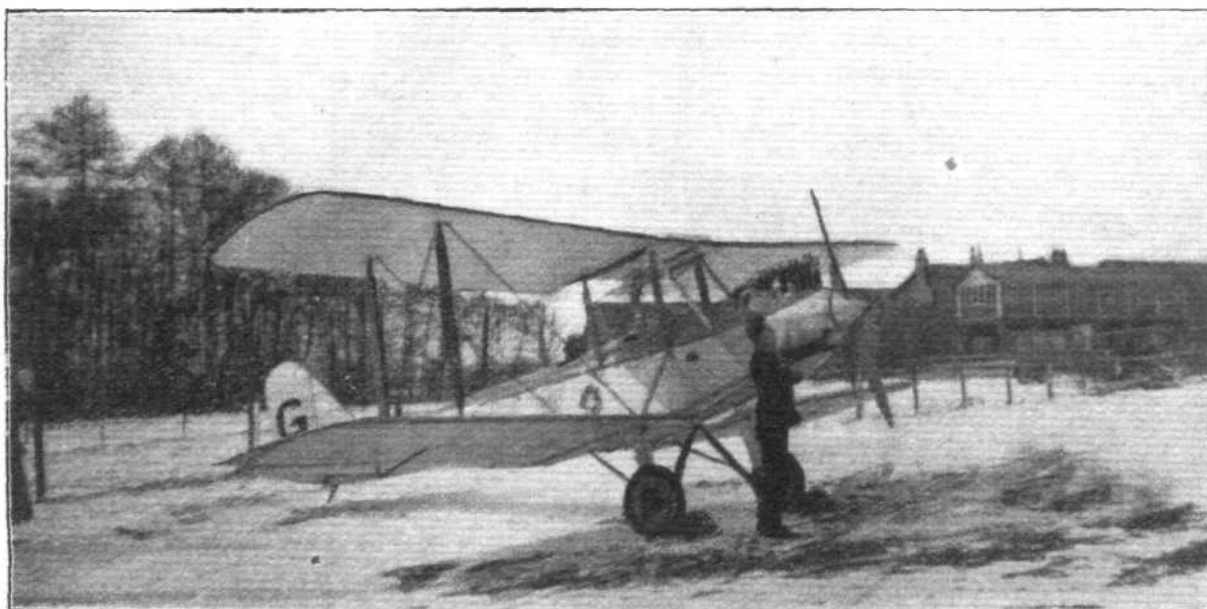
NORFOLK & NORWICH AERO CLUB

REPORT for week ending December 8.—Machines in commission, 2, ZW and QX. Flying time for week, 12 hrs. 55 mins. Pupils under instruction: (6), 5 hrs. 5 mins. Soloists: (2), 4 hrs. 15 mins. "A" Pilots: (8), 3 hrs. 30 mins. Test flight: 5 mins.

Much better weather of a bright frosty nature has brought the pilots out, and although a little ground mist has been troublesome at times we would like this weather to continue. It is more cheering to do a bit of flying for a change after sitting around for the last week or two.

Notice is given to all and sundry that on and from Monday next, 17th inst., until Tuesday, January 1, the Club will be closed down for staff Christmas holidays.

At a first glance it may seem that this is a picture of an Avro "Avian" (Cirrus) amidst the snow at St. Moritz. Actually it was taken at Woodford Aerodrome, Cheshire, the home of the Lancashire Aeroplane Club



SCOTTISH FLYING CLUB, LTD.

REPORT for week ending December 1.—Pilot instructor, Mr. R. M. Stirling, Ground engineer, Mr. W. Calder. Machines in commission during week: X Moth, G-EBYG, Avro Avian G-EBTY. Dual instruction, 15 hrs. 15 mins. Solo flying, 14 hrs. 25 mins. Joyrides and tests, 5 hrs. 40 mins. Total, 35 hrs. 20 mins.

Instruction (with Mr. Stirling): Misses K. Sinclair and J. Hendry, Messrs. D. Fairweather, E. Robertson, H. Primrose, A. Young, M. Cohen, D. Barclay, J. Wood Harrington, W. Clark, R. Whyte and Lord Clydesdale.

The general improvement in weather conditions this week is reflected in our increased flying hours. In view of the short days and the deplorable state of the landing ground, our total of 35 hours 20 mins. is really gratifying, and speaks well for the general enthusiasm. Taking advantage of the bright spell, Mr. D. K. Fairweather and Mr. H. D. Primrose were launched on their first solo flights, and both are to be congratulated on their excellent performances. On Thursday afternoon Mr. Fairweather provided us with quite a thrill by disappearing into a cloud bank on his third solo attempt, and failing to return for nearly two hours. The rumour that he had gone in search of his customary rainy day is reported to be quite untrue. The real explanation is that it took most of the time to decide exactly which lake was Moorpark Aerodrome. In the course of the week, Mr. E. R. Robertson and Mr. Fairweather completed their "A" licence tests in a most satisfactory manner. Both are "ab initio" pupils.

The end of this week also marks the end of our first complete year of existence. On the whole, it appears that it has been quite satisfactory but until accounts are prepared and the general meeting held, our exact position cannot be stated. On Friday, December 7, the club holds the second of its season's dances in the "Plaza" Palais de Danse, Glasgow, at which it is expected there will be a good attendance. We ask that any members of other clubs who might be in Glasgow at that time, will accept this invitation and we assure them of a hearty welcome.

REPORT for week ending December 9.—Pilot instructor: Mr. R. M. Stirling. Ground engineer: Mr. W. Calder. Machines in commission during week: X Moth G-EBYG, Avro Avian G-EBTY. Dual instruction, 6 hrs. 45 mins.; solo flying, 13 hrs. 25 mins.; joy-rides and tests, 7 hrs. 55 mins. Total, 28 hrs. 5 mins.

Instruction (with Mr. Stirling): Miss Hendry, Messrs. J. E. Young, H. W. Garbutt, A. McDonald, A. Walter, J. Mitchell, H. D. Primrose, D. K. Fairweather, and A. Cairns Smith; (with Mr. J. C. Houston): Messrs. F. W. Murray and G. E. Muir.

Practically nothing of interest, either with regard to flying or general matters, falls to be recorded this week. Weather conditions have been a peculiar mixture of blue skies, gales and minor snowstorms, yet, withal, our total flying time for the week is quite satisfactory. On Monday Miss J. Hendry completed her "A" Licence tests most satisfactorily, and we look forward to congratulating her as the first lady holder of an "A" Licence in Scotland.

There was an encouraging turn-out at the Club dance on Friday evening in the "Plaza," when a most enjoyable evening was spent.

SOUTHERN AERO CLUB

REPORT for week ending December 9.—(Hon. Sec. *Pro tem*): Miss N. B. Birkett, Shoreham Aerodrome, Sussex. Machines: Avro 504K (Le Rhone), G-EBYB.

Flying has, unfortunately, been at a standstill during the past two weeks, owing to our dual Avro 504K, G-EBYB, having been damaged by the recent gales. A particularly nasty gust carried away a section of roofing on a new hangar, dropping it on to the machine's top planes. However, she will be flying again this week.

In the meanwhile, members have been spending plenty of time sampling our newest innovation—a sandwich bar and buffet in the clubhouse. There one can obtain anything from a cocktail—yes, we have a licence—to a complete luncheon or tea. Owner pilots passing this way please note!

Vast improvements have taken place at the aerodrome, and new hangars and workshop accommodation are nearly completed.

SUFFOLK & EASTERN COUNTIES AEROPLANE CLUB

REPORT for week ending December 8.—Instructor: G. E. Lowdell, A.F.M. Ground engineers: "A and C," J. Shearman; "C," E. Mayhew; "A," G. Keeley. Machines: 3 Blackburn "Bluebirds," RE, SZ and UH. Total flying time: 14 hrs. 20 mins. Six members were given dual instruction (8 hrs. 30 mins.); 3 members flew solo under instruction (1 hr 10 mins.). Flights were made by one "B" and four "A" Licence members (4 hrs. 5 mins.); one passenger was carried (5 mins.); eight tests were made (40 mins.). Dr. Dunn and Mr. Colingwood carried out successful first solos during the week.

Mr. Schofield flew over to Norwich, and Dr. Sleigh answered a call to render first-aid after a motor accident by flying over to the scene, thus saving about 20 mins.

The week has been somewhat marred by fog, with the result that there was no instruction at Cambridge and consequently no Ipswich-Cambridge airway.

We deeply regret the loss of Mr. F. Verney, an "A" Licence pilot and one of our most popular and keenest members, who died suddenly on Friday. He had an accident playing rugby some weeks ago and had been laid up

Light 'Plane Flight to Gold Coast

CAPT. R. S. RATTRAY, a Provincial Commissioner on the Gold Coast, and a private owner-pilot, is returning to West Africa by air. He left Croydon on December 5 in his Cirrus-Moth to follow a course across France and down the east coast of Spain, then along the West African coast to Dakar and across country to the south of Timbuktu. The final course will be south to the Gold Coast, the total distance from England being 5,000 miles.

Miss O'Brien's Accident

THE Aeronautical Correspondent of the *Morning Post* states that the technical investigation into the accident which befell Miss S. O'Brien recently in her D.H. "Moth" is likely to prove that the rudder controls were not connected. Miss O'Brien was giving instruction to a pupil, who was flying in the back seat where the controls were working properly, but in the front cockpit, where sat Miss O'Brien, the rudder bar was not connected up. The machine went into a spin when

with a broken ankle. We desire to express our deepest sympathy with his relatives in a loss which we also feel keenly.

Mr. E. Mayhew, our "C" Licence ground engineer, retired to bed with the flu on Saturday, but Mr. J. Shearman, the representative of the Blackburn Aeroplane Co. at Martlesham, came to our rescue.

YORKSHIRE AEROPLANE CLUB

REPORT for week ending December 8.—Pilot Instructor: G. R. Beck. Ground engineer: R. Morris. Machines in commission: 3 (TB, SV and RF). Flying time, 16 hrs. Instruction, 6 (3 hrs. 30 mins.); "A" pilots, 6 (11 hrs. 55 mins.); passengers: 2 (20 mins.); test flights 3 (15 mins.).

FROM THE FLYING SCHOOLS

Brooklands School of Flying, Ltd., Brooklands Aerodrome

REPORT for week ending December 9.—Instructor: Capt. E. A. Jones. Ground engineers: W. S. Hellon, W. A. Watts. Machines in commission, G-EBWJ and G-EBVE. Total flying time, 13 hrs.; pupils under instruction, 12 (9 hrs.); soloists, 2 (3 hrs. 10 mins.).

We welcome the following new pupils:—Messrs. A. V. C. Douglas, W. L. Mummery, and L. R. Nienwenhuizer.

The school machines helped to further the cause of the British film industry on Saturday morning, taking off in formation and other manoeuvres, which proved very successful.

Nothing daunting, pupils have turned out in great force for much aviation, despite the cold and frosty mornings which have been experienced this week.

The De Havilland Flying School, Stag Lane Aerodrome

REPORT for week ending December 2.—Total flying time, 57 hrs. 45 mins. Instruction, dual, 13 hrs. 15 mins.; solo, 29 hrs. 5 mins. Other flying, 15 hrs. 25 mins.

Mr. L. Kashif, our second Egyptian pupil accomplished a very successful first solo on our advanced type D.H.9 Jaguar.

On Friday, one of our instructors took Sir Sefton Brancker, to Cardington, in Capt. de Havilland's cosy Coupé Moth, for an inspection of the giant airship which is being constructed there.

Fifteen new Gipsy Moths made their initial acquaintance with the "higher atmosphere," and were despatched along with the usual weekly quota for Canada and Australia.

REPORT for week ending December 9.—Total flying time, 45 hrs. 10 mins.; instruction: Dual, 11 hrs. 30 mins.; solo, 14 hrs. 55 mins.; other flying, 18 hrs. 45 mins.

Despite adverse weather conditions, this week has proved very interesting at Stag Lane.

The outstanding feature was the capturing of another world's aeroplane record for England by Mr. A. S. Butler, chairman of the de Havilland Aircraft Co., Ltd., in his D.H. Gipsy Moth. Mr. Butler is to be congratulated on the very fine way in which he handled his craft in very nasty weather, to make the world's record speed for two-seater light aeroplanes.

It was rather appropriate after this fine performance by the Chairman that the whole company should assemble at the Wharfedale Rooms for the Annual D.H. Dinner. Naturally everyone was in good form, and the function can be voted a roaring success.

OVERSEAS CLUBS

THE PERTH (WESTERN AUSTRALIA) FLYING SCHOOL

FLYING summary from March 19, 1927, to October 25, 1928.—Pupil members (dual), 359 hrs. 55 mins.; 28,793 miles. Pupil members (solo), 56 hrs. 40 mins.; 4,534 miles. Pilot members (dual), 23 hrs. 55 mins., 1,913 miles. Pilot members (solo), 14 hrs. 45 mins.; 1,180 miles. Total, 455 hrs. 15 mins.; 36,420 miles.

REPORT for November, 1928.—Number of pupil members in training, 16; number of pilot members, 28; number of pupils on waiting list, 11.

Pilot Members.—Mr. P. C. Bignell has completed the course of instruction and has received his "A" licence from the Civil Aviation Department.

Training Operations.—Advantage has been taken by pupils of the improved weather conditions during the past few weeks, resulting in increased activity in the school.

Mr. D. J. Colquhoun on October 11 made a first solo flight of 15 mins. after only 3 hrs. 20 mins. dual instruction.

A number of other pupils have practically reached the stage when they will be flying solo, and those pupils now on the waiting list will be able to commence training almost immediately.

"Movies" from a Moth.—One of the school aeroplanes was specially fitted recently to enable a cinema photographer to obtain aerial pictures of Perth and surrounding districts. These pictures will form part of the film which is being prepared in connection with the State Centenary Celebrations in 1929.

the pupil was flying, and Miss O'Brien had only the use of the joy-stick in her efforts to pull it out.

Mr. John Carberry Reaches Nairobi

MR. JOHN CARBERRY, the Kenya pilot and pioneer, reached Nairobi on December 10 in his Fokker monoplane *Miss Africa*. He started the flight from Amsterdam on November 27. The stage from Khartoum to Nairobi was flown in two hops, one of 750 miles to Mongalla and the other of 620 miles to Nairobi. Crowds welcomed his arrival at Nairobi.

Club Enterprise

THE Newcastle Aero Club has decided to despatch a machine with an instructor and mechanic to any centre within 50 miles of the city where six or more pupils wish to fly. Each place will be visited about three times per week. The rate of instruction will be £1 per hour, plus £1 1s. subscription.

AIRISMS FROM THE FOUR WINDS

Great Flying-Boat Cruise

THE four R.A.F. Supermarine "Southampton" (Napier) flying-boats engaged on the extended Far East cruise, and the return flight to Singapore, reached Penang on December 9 and Singapore on December 10, thus concluding the long and remarkable cruise which commenced from England on October 17, 1927.

Anniversary of Flight

THE 25th anniversary of the first flight by a heavier-than-air machine, made by the Wright Brothers at Kitty Hawk, North Carolina, was celebrated at Dayton, Ohio, on December 10. Tributes were paid to Mr. Orville Wright, who lives at Dayton, and to the memory of his dead brother, Wilbur. Ten large aeroplanes brought foreign air experts, diplomats, and Government representatives from Chicago. Lord Thomson, ex-Minister for Air, who is visiting America for the International Air Conference, was one of the speakers. There will be later ceremonies at Kitty Hawk.

Venue for Next Schneider Race Chosen

THE next Schneider Trophy Race will probably be held at the Solent. France, America and Italy will all compete with England, who is the present holder of the Trophy.

Veteran Navigators

A MEETING of the Veteran Aerial Navigators was held on December 5. Flight-Lieut. E. L. Johnson presided. He was the navigating officer of R.33. The principle guest was Sir Sefton Brancker. Others present were Flying Officer F. W. M. Downer, navigator to Capt. F. Courtney on his first Atlantic attempt, Capt. F. Tymms, Capt. F. Entwistle, Capt. L. Hope, Capt. G. P. Olley, Mr. Chattaway, Mr. Jeff and Mr. W. Lawford.

China Orders "Moths"

THE representatives of the De Havilland Aircraft Co., Ltd., in China—namely, Arnhold and Co.—have obtained an order in face of keen German and American competition for four D.H. "Moths." The buyer is a Chinese commercial aviation company. The De Havilland Aircraft Co., Ltd., confirm this order.

Escape at Leysdown

FLYING OFFICER CONSTANTINE was at target practice, over the water, off Leysdown, in the Isle of Sheppey, when he suddenly dived his single-seater fighter into the water. Flying Officer Henderson, who saw the accident, immediately dived in and swam to the wreck, where he found the pilot exhausted. He brought him safely to the shore. Leysdown

was a gunnery and bombing centre during the war for the Royal Naval Air Force observers and gunlayers passing through the course at the near-by aerodrome of Eastchurch. Owing to its isolated position, Leysdown was useful for firing at targets in the sea and dropping 112-lb. bombs. The gunnery pupils used to make the journey from Eastchurch daily in the light railway. In 1917, Farman "Shorthorns" were the training machines for this practice.

Hangman Requires an Aeroplane

MR. ARTHUR ELLIS, the Canadian official hangman, has asked for an aeroplane to carry him across the wide Dominion for his gruesome appointments. His business extends from coast to coast, and it is impossible to respond to all calls upon his services unless air transport is available.

American Aircraft Production

AIRCRAFT production of military and civil types in America in 1928 will exceed 4,000 machines, of a total value of £15,000,000. Next year it is anticipated that between 10,000 and 12,000 machines will be manufactured, with a turnover in the industry of more than £20,000,000.

Polish Air Woman

IT is reported that Miss Kalina Iwaszkiewicz is the first Polish woman to receive a pilot's licence.

Portugal's First Woman Pilot

THE first woman pilot in Portugal has just passed her air tests at the School of Military Aviation at Cintra. Her name is Donna Maria de Lourdes Braga Teixeira.

Exploration Flight Disaster

CAPT. G. PLUSCHOW, a German airman, is believed to have been lost in a seaplane flight over the Strait of Magellan, after setting out on a scientific exploration flight from Tierra del Fuego on December 7. During the war he escaped from England, where he had been a prisoner.

Saved by Salvator Parachutes

TWO military aeroplanes from the Centocelle Aerodrome in Italy, collided in the air, but the three airmen involved descended safely with their Salvator parachutes. On November 30, at Field Breda, Milan, another pilot, Signor Comi, was saved with a Salvator, when his machine caught fire, which touched the parachute cords without any dire effect.

Brazilian Air Crash Inquiry

THE Brazilian Government has ordered an inquiry into the accident to the seaplane which fell into the sea off Rio de Janeiro recently, killing the entire crew and passengers, numbering 14. In the first reports, the number killed was stated to be 17.

Naval Terms Barred

THE Air Ministry has issued a notice stating that the terms "port" and "starboard" will cease to be used in relation to aircraft and be superseded by "left" and "right."

Air Conference at Washington

THE International Civil Aeronautical Conference is taking place this week for three days, December 12, 13 and 14, at Washington, America. It was expected that the following countries would be represented:—Austria, Australia, Belgium, Canada, Chile, China, Costa Rica, Cuba, Czechoslovakia, Denmark, Finland, France, Germany, Great Britain, Guatemala, Hungary, Irish Free State, Italy, India, Mexico, Netherlands, New Zealand, Norway, Panama, Persia, Poland, Spain, Sweden, Switzerland and Venezuela. Sessions are taking place each day, and on December 15 there will be an air exhibition at Bolling Field and Anacostia Naval Air Station by the U.S. Army, Navy and Marine Air Services.

Not Supercharged

IN our article on the Westland "Wizard," published on November 1, 1928, it was stated that the performances given were attained with supercharged engine. This was incorrect, and should have read "un-supercharged." Consequently, the performance is all the more noteworthy.

Zenith Carburettor and New World's Record

A ZENITH carburettor was fitted to the "Gipsy" engine of the D.H. "Moth," in which Mr. A. S. Butler set up a world's speed record of 119.84 m.p.h. for light two-seater aeroplanes, on December 7.



The platinum and diamond brooch, showing a kangaroo leaping across the world from England to Australia, which Sir Charles Wakefield presented to Mrs. "Bert" Hinkler at the Savoy dinner given by Sir Charles in honour of Sqdr.-Ldr. Hinkler

A REALISTIC MODEL AEROPLANE

MODEL aeroplanes, it must be admitted, provide a very fascinating hobby, both in their construction and in flying them, and in either case one can obtain instruction as well as amusement. Aeromodelists, however, have frequently come up against one "snag," and that is to construct a model which not only *looks* like a real machine, but which will also fly well. In other words, it is somewhat of a problem—if not altogether impossible—to build a true-scale model of any particular make of aeroplane which will fly. It is generally accepted that a really good flying model departs from realism more and more as its flying qualities improve.

We are, therefore, glad to have the opportunity this week of introducing to our readers a very promising effort that has just been made to tackle this problem. One of our pioneer aeromodelists, Mr. A. E. Jones—whose name will be familiar to many of our readers—has designed, and put into production a small model monoplane which, as may be seen from our illustrations, not only looks very much like the real thing, but which actually is capable of making quite good flights.

While we have had some of these models to try out, unfortunately weather and other circumstances have not allowed us to carry out our tests with the thoroughness and

apparently, for it had snapped close to the airscrew spindle, and the elastic "bunched-up" in the tail of the fuselage. This, naturally, made the model tail heavy, and losing flying speed as it was climbing and turning, it did what, unfortunately, many a full-sized machine does under the circumstances. The behaviour of the model throughout was most interesting and instructive to watch.

From our preliminary tests we rather think the best results are obtained, when flying out of doors, in comparatively still air, for while it behaves well in a wind, its flight is less easy to control as regards direction, for it appears to be quite a sensitive little 'bus. While a certain amount of "knack" is required in launching, it does not, we think, call for a great deal of skill, and after a little practice and a few "crashes," one soon gets "the hang of it."

And talking of crashes, brings us to another feature of this little model—its extraordinary strength. We had many crashes—deliberate and otherwise—and bad landings during our tests, but so far the model remains undamaged. The motor gave out occasionally, and the airscrew spindle, after repeated "bending straights" eventually broke and had to be replaced—a very simple job—but that was all the trouble experienced.



A REALISTIC MODEL AEROPLANE: This small monoplane which measures 20½ ins. span, not only looks like a full-size machine, but it also flies well. It has just been put into production by A. E. Jones, Ltd., of 97, New Oxford Street, W.C.1

completeness we had intended to employ, but we can say that as far as we have gone—and tests are still in progress—we feel satisfied that this model *will* fly, and fly well. In addition to this, it has other features, which we will describe presently.

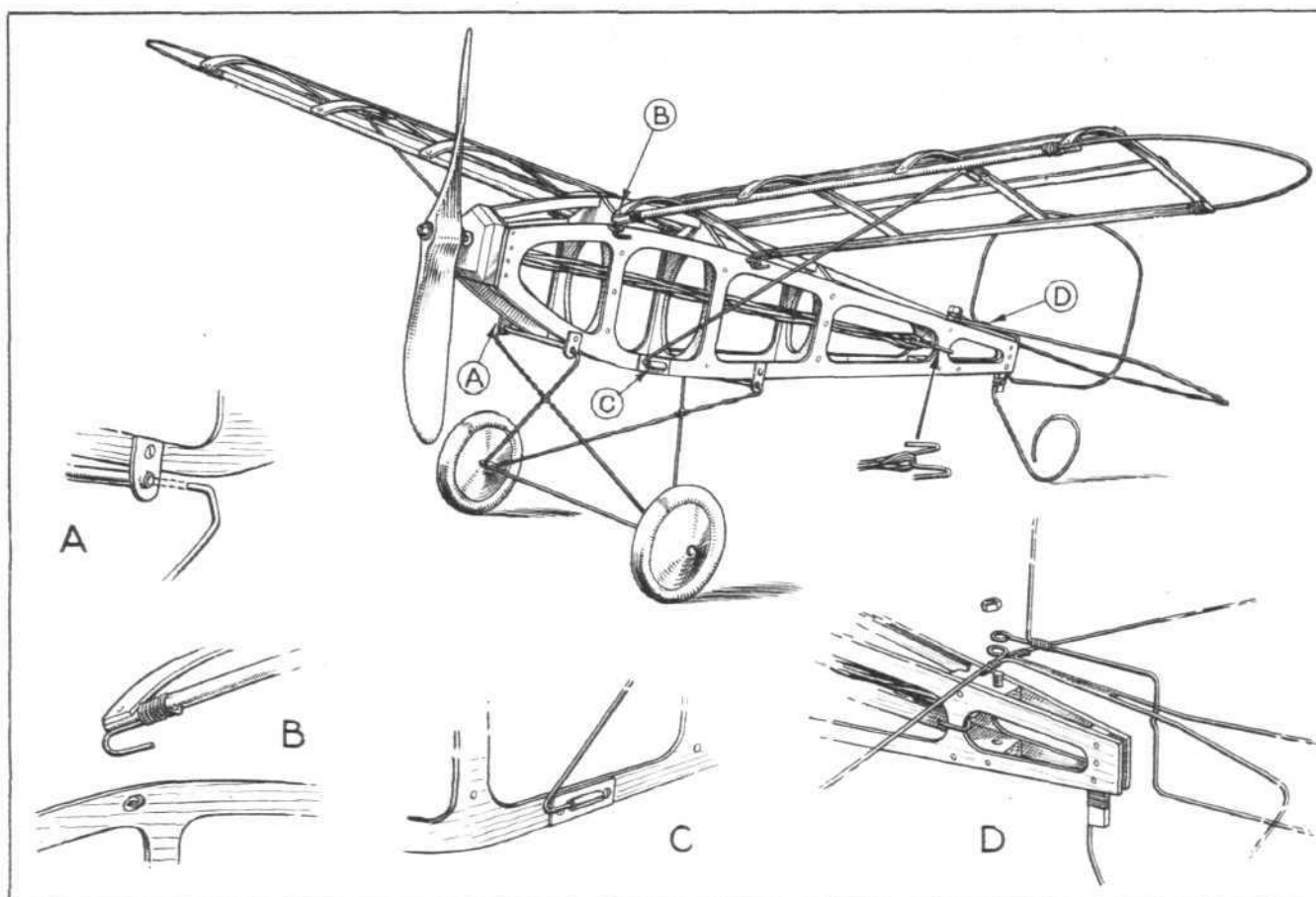
Of course, it should be understood that this model will not make *long* flights, nor *r.o.g.* flights, its size (it is only 20½ ins. span) and comparatively small (of necessity) motor, could hardly be expected to allow of this. Nevertheless, the short flights obtained—so far our tests have been confined, in a restricted area, to about 100 ft., but we feel this can be bettered—can provide in many ways considerable amusement and instruction.

As an example of the latter, let us describe one of our test flights, in which "full-scale" cause and effect were demonstrated in a realistic manner. After a series of short trials to obtain proper adjustment it was decided, as the model appeared to be flying nicely, to attempt a long flight, and the "motor" was accordingly given a full wind up. The model was launched and started off well with a slight climb, when all of a sudden there was a "p-r-r-r-up," the model wavered, made a slight turn to the right, then commenced a dive, and finally "nosed" to the ground in a perfect spin, crashing into a bed of flowers! The elastic motor had seen its day,

Constructionally, this model has many good points. The fuselage is built up of three-ply top, sides and bottom, with transverse members of the same material, all fretted out as shown in our sketch. It is exceptionally light and rigid. The "engine-plate," or nose-piece, consists of an aluminium casting carrying the airscrew and spindle, which fits on to the fuselage by means of two pins. Incidentally, this nose-piece provides the necessary weight forward to balance the model. The fuselage is covered with doped Jap silk.

The wings have bent wood frames, with wire tips, and are single surfaced with doped Jap silk. Their attachment is novel and efficient; at the roots are hooks which fit into eyes on the top-sides of the fuselage, while a wire strut, hinged to the centre of each wing and hooked at its lower end fits into a tiny rocket on the lower-side of the fuselage. This gives a rigid attachment which provides quick and easy erection and de-mounting. The tail surfaces, having wire frames, are secured at their forward ends by a common bolt and nut on the top of the fuselage, the leading edge of the rudder fitting within a groove in the fuselage stern-post, and so keeping the surfaces in situ.

The undercarriage is of wire, the upper ends of which spring into transverse tubular members attached to the bottom of the fuselage, as shown in our sketch. If necessary,



A REALISTIC MODEL AEROPLANE : Constructional details, showing the built-up plywood fuselage, and methods of attaching the wings, tail surfaces, undercarriage, and elastic motor.

to alter the balance of the model, the undercarriage may be reversed. Thus it will be seen that the model is very easily dismantled for transport purposes, and when "packed" occupies but little space.

Another ingenious feature is the mounting of the "motor." The elastic is first secured to the airscrew spindle, then the other end is looped over a hook on the end of a wire supplied with the model and the wire is passed through the fuselage from the nose until it emerges at the stern. The end of the elastic is then secured to a "W" hook, which fits on the

sides of the fuselage as shown—the wire, of course, having been withdrawn.

In conclusion, we feel certain that these models can provide a great deal of amusement for old or young, and even the serious experimenter will find them useful. We hope, shortly, to give a further report on their performance and meanwhile look forward to the production of another type (a "parasol") which we understand is now on the way. Further particulars of these models may be obtained from Messrs. A. E. Jones, Ltd., 97, New Oxford Street, London, W.C.1.

NEW U.S. GOVERNMENT PUBLICATION ON CIVIL AERONAUTICS

THE Government Printing Office, Washington, D.C., has just issued a new publication entitled "Civil Aeronautics." This publication has been compiled by the Office of the Legislative Counsel, United States Senate, and has been printed for the use of the Committee on Interstate and Foreign Commerce, House of Representatives, of the Congress of the United States. It contains 178 pages, and will be found very valuable to any person interested in the legislative regulation of civil aeronautics, to which it is primarily devoted.

The present publication is a revision of a similar publication issued in 1923, which was entitled "Law Memoranda Upon Civil Aeronautics."

The new publication contains the text of the air commerce Act of the United States of 1926, and material relating to the legislative history of that Act, including committee reports and a comparison of the bills as passed by the Senate and by the House; extracts from reports and articles on the legal problems of civil aeronautics including publications of the American Bar Association and the Conference of Commissioners on Uniform State Laws; extracts from reports

on legislation on civil aeronautics of the States of the United States, including decisions of State courts, and the text of international agreements relating to civil air navigation. The entire field of the legislative regulation of civil aeronautics is covered comprehensively right up to August 1, 1928.

Among the many valuable articles contained in this publication will be found several reports prepared by the Committee on Air Law of the American Bar Association, through its former chairman, William P. MacCracken, now Assistant Secretary of Commerce for Aeronautics, and Chester W. Cuthell, the present chairman.

A copy of this publication may be purchased for 25 cents from the Superintendent of Documents, Government Printing Office, Washington, D.C., which price includes delivery to all points in the United States and its possessions, and also to Canada, Cuba, Mexico, Newfoundland, and the Republic of Panama. To all other countries, an extra charge of 5 cents is made for postage. Remittances should be made by money order, or may be by cash at risk of sender. Postage stamps are not accepted.

Hinchcliffe's Machine?

THE B. F. Goodrich Company, of Akron, Ohio, have stated their belief that wreckage washed up recently at Downings, co. Donegal, Ireland, is that of the Stinson-Detroit monoplaner chassis. This machine, named the *Endeavour*, was that in which Capt. Hinchcliffe and Miss Elsie Mackay lost their lives when attempting an east to west

Atlantic flight, last March. The chassis, when found, had a wheel still left with a tyre pumped hard, and bearing the following inscription, "Goodrich Silvertown Cord Aeroplane."

Missing Seaplane

A FINNISH army seaplane has been missing for some time in the Gulf of Finland. The mechanic's body has been washed ashore, but the pilot is still missing.

THE ROYAL AIR FORCE

London Gazette, December 4, 1928

General Duties Branch

Flying Officer C. H. Tighe is restored to full pay from half pay (Dec. 1).

RESERVE OF AIR FORCE OFFICERS

General Duties Branch

Flying Officer F. D. Cummings, D.F.C., is transferred from Class A to Class C (Nov. 24); Flying Officer D. H. B. Clark is transferred from Class AA

to Class C (Dec. 5); Pilot Officer J. R. Wardrop is transferred from the Special Reserve to the Reserve, Class C (Oct. 24).

AUXILIARY AIR FORCE

General Duties Branch

No. 603 (City of Edinburgh (Bombing) Squadron.—The following to be Pilot Officer:—E. S. V. Burton (July 31). (Substituted for Gazette Sept. 11.)

ROYAL AIR FORCE INTELLIGENCE

Appointments.—The following appointments in the Royal Air Force are notified:—

General Duties Branch

Wing Commander A. A. Walser, M.C., D.F.C., to R.A.F. Depot, Uxbridge, 5.11.28.

Squadron Leaders: A. J. Capel, D.S.O., D.F.C., to R.A.F. Depot, Uxbridge, 5.11.28. J. W. Woodhouse, D.S.O., M.C., to Armoured Car Wing, Iraq, 22.11.28.

Flight Lieutenants: C. W. Busk, M.C., to R.A.F. Depot, Uxbridge, 5.11.28. H. J. Collins to No. 101 Sqn., Bircham Newton, 9.1.29. R. B. Sutherland, D.F.C., to No. 14 Sqn., Middle East 11.11.28. G. S. Shaw, to No. 8 Sqn., Aden Command, 1.12.28. F. G. A. Robinson, to No. 11 Sqn., Netheravon, 25.11.28. E. H. D. Spence, to No. 441 Flight, 19.11.28.

Flying Officers: G. W. P. Irwin, to R.A.F. Depot, Uxbridge, 5.11.28. A. N. Francombe, to R.A.F. Depot, Uxbridge, 5.11.28. W. L. McLaren, to R.A.F. Depot, Uxbridge, 1.12.28. E. C. L. Richardson, to No. 10 Sqn., Upper Heyford, 9.12.28. C. H. Tighe, to No. 13 Sqn., Andover, 1.12.28. J. W. M. Nancarrow, to R.A.F. Station, Duxford, 7.12.28. V. C. Taylor, to No. 3 Flying Training Sch., Grantham, 3.12.28. D. L. Thomson, to Aircraft Park, India, 1.11.28.

Stores Branch

Flying Officers: A. A. Quayle to R.A.F. Reception Depot, West Drayton, 12.11.28. E. F. Smith, to H.Q., Air Defence of Great Britain, Uxbridge, 3.12.28.

Pilot Officer: J. E. Reynolds, to H.Q., Air Defence of Great Britain, Uxbridge, 30.11.28.

Accountant Branch

Flying Officer G. Goodall, to Station H.Q., Hinaidi, 21.11.28.

Medical Branch

Group Captain A. V. J. Richardson, O.B.E., M.B., D.P.H., to Aircraft Depot, India, 13.10.28.

Squadron Leader R. J. Aherne, M.C., to Palestine General Hospital 1.11.28.

Squadron Leader F. E. Johnson, to Central Flying School, Wittering, 29.11.28.

Flight Lieutenants: E. J. Jenkins, to No. 14 Sqn., Middle East, 1.11.28. R. G. Freeman, to R.A.F. Depot, Middle East, instead of to H.Q., Middle East, as previously notified, 20.10.28. F. W. Goodread, to H.Q., Air Defence of Great Britain, Uxbridge, 27.11.28. T. J. D. Atteridge, to Central Med. Estab., 1.12.28. G. M. Anderson, M.B., to R.A.F. Station, Donibristle, 14.12.28.

Flight Lieutenants: R. H. Stanbridge, to H.Q., Middle East 15.11.28. G. P. O'Connell, M.B., to R.A.F. Officers' Hospital, Uxbridge, 1.12.28.

Flying Officers: E. P. Carroll, to Station H.Q., Hinaidi, 27.10.28. B. A. Porritt, M.B., to Station H.Q., Cattewater, 3.12.28. J. L. Groom, to R.A.F. Base, Calshot, 27.11.28. N. M. Jerram, to Elec. & Wireless Sch., Flowerdown, 27.11.28. G. W. Paton, M.B., to R.A.F. Station, Upper Heyford, 27.11.28. G. O. Williams, B.Sc., to No. 5 Flying Training Sch., Sealand, 27.11.28.

Flying Officers: J. F. McGovern, M.B., to No. 84 Sqn., Iraq, 8.11.28. S. B. S. Smith, to School of Army Co-operation, Old Sarum, 28.11.28.

NAVAL APPOINTMENTS

The following appointments have been made by the Admiralty:—

Lieutenants (Flying Officers) R.A.F.: S. Borrett, to Tamar; H. C. Toppin, to Greenwich (Nov. 7).

Promotions

Sub-Lieutenant G. H. Beale, to rank of Lieut. (seny. April 1).

Sub-Lieutenant (Flying Officer, R.A.F.) P. D. Heinemann, to rank of Lieutenant, and attached to R.A.F. (in continuation) in that rank (seny. Nov. 30).

Royal Marines

Lieutenant (Flying Officer, R.A.F.) J. S. Martin, to Greenwich (Nov. 6).

DE HAVILLAND WORKS ANNUAL DINNER

A FEW years ago it would have been possible to hold the annual works dinner of the de Havilland Aircraft Co., Ltd., in an average size dining room. On Friday last, the Wharncliffe Rooms of the Hotel Great Central in Marylebone Road were only just large enough to accommodate the 450 or so diners who had gathered together under the chairmanship of Mr. Alan S. Butler for the annual works dinner. In spite of the size of the gathering, there was that feeling of intimate good fellowship which characterised the de Havilland firm in the earlier days, and which in some mysterious way the company has managed to retain, although the number of employees is now well over 1,000.

After honouring the loyal toast, the chairman called upon Mr. Tom Clark to propose the toast of the de Havilland Aircraft Company. Mr. Tom Clark reminded them that twelve months ago they had met in the canteen; they would remember that. Some of them would remember going home! On that occasion it was announced that the chairman of the company, and the chairman that evening had contributed £250 to their fund. Referring to the growth of the firm, Mr. Clark humorously told of how the workers would go home at night, passing a site on which the foundations for a new shop had been laid. When they returned in the morning, the roof had been put on! He expressed the hope that the new members of the works staff would be able to stand up to the production barometer.

In admiring terms Mr. Clark then recalled the number of world's records which had been established recently by de Havilland aircraft, some with Capt. Broad on board, and one piloted by their chief, Capt. de Havilland himself, who took his good lady as a passenger on a visit to Mars! In the King's Cup race there were three Gipsy Moths entered; all three finished the race, and one of the three, piloted by Capt. Hope, won it. For a new type of engine that was a record to be proud of. He urged the assembled company to turn the de Havilland Aircraft factory into a record in the coming year by bringing the output up to what the demand required.

The Chairman (Mr. Alan S. Butler) regretted that he had not prepared a humorous speech, such as that to which they had just listened. Mr. Tom Clark, he recalled, had been associated with Capt. de Havilland since 1914 (which was

another record!). Giving a brief outline of the activities of the de Havilland Aircraft Company during the last year, Mr. Butler said the superannuation fund had been well supported, and now counted 41 per cent. of contributing members. Up to the present time, i.e., up to that evening, 275 "Moths" had been built, as compared with 185 the previous year. Their output was booked up till the end of March next. The number of employees last year was 400; at present the number was 1,560! In February, 1927, and March, 1928, respectively, branches of the company were started in Australia and Canada, and both were doing well. He read cablegrams from both branches expressing best wishes for an enjoyable evening. Mr. Butler also referred to the establishment of the Moth Aircraft Corporation in the U.S.A., while, as regards their other types of machines, it was gratifying to learn that, largely as a result of the good service which the "Hercules" had given on the Cairo-Basra air route, machines of this type had been ordered for the new Perth-Adelaide air service in Australia. At Stag Lane the D.H. Flying School had, during the last 12 months, done no less than 4,445 hours' flying. Referring to the manner in which the American motor-car industry had captured the world trade, Mr. Butler concluded by saying that it was up to them to see that the de Havilland Aircraft Company was leading in aircraft world trade.

Captain Geoffrey de Havilland, before presenting the challenge cups to the various winners, congratulated their chairman, Mr. Butler, and Mrs. Butler, on having that day established another light 'plane record over the 100 km. course by putting up an average speed of just under 120 m.p.h. He then presented the D.H. Challenge Cup to the Engine Department, and the D.H. Aussie Cup to the Office Staff. This was the second time the cup had been won by the Engine Department, and Captain de Havilland said it seemed to him it was time some of the other Departments bestirred themselves.

The rest of a very enjoyable evening was filled in by the D.H. "Gipsy" orchestra, which played very ably indeed, and by Mr. W. Bell, tenor; Mrs. Farge, contralto; Mr. Love-day, in a musical monologue, Mr. McCabe, light baritone; and Mr. Albert le Faure, who proved quite a clever conjurer. For many of those present, "God Save the King" came all too soon.

CORRESPONDENCE

The Editor does not hold himself responsible for opinions expressed by correspondents. The names and addresses of the writers, not necessarily for publication, must in all cases accompany letters intended for insertion in these columns

THE MOTOR CYCLE OF THE AIR

[2179] I note with exceeding interest your article and correspondence in the last two issues of FLIGHT, headed "The Motor Cycle of the Air."

At present I am travelling round the world visiting the principal countries in order to broaden my knowledge of modern aircraft and aviation generally.

There is in Australia an eagerness to fly, and an exceptional market awaiting this type of machine; but it must be good and the price right. I am pleased to see at last the production of a single-seater plane is contemplated at a reasonable price and, together with numerous landing grounds, appears to me the foundation for preparing to "get into the air."

My experience is that the plane must be a monoplane-metal for preference, equipped with an air-cooled engine of approximately 30 h.p., split-axle type undercarriage, range about 200 miles, landing speed 35 to 40 miles an hour, and the price about £300 (a similar type was the "Pander" built some years ago, but this monoplane was wood construction). In conclusion, I wish every success to this firm, which is about to commence the manufacture of single-seater light aeroplanes

W. J. RANKIN

London.

December 10, 1928.

NOTICES TO AIRMEN

Use of Royal Air Force Aerodromes by Civil Aircraft

It is notified that

1. Pilots of civil aircraft effecting a landing at Royal Air Force aerodromes must immediately report their arrival to the Aerodrome Duty Pilot.
2. Paragraph 81 of the Air Pilot: Great Britain is affected and will be amended in due course.

(No. 77 of 1928.)

Air Navigation Directions, 1928 (A.N.D. 7)

1. The Air Navigation Directions, 1926 (A.N.D. 6) and the amendments thereto (A.N.D. 6A. and A.N.D. 6B.) are about to be superseded by a consolidated and revised edition entitled Air Navigation Directions, 1928 (A.N.D. 7).

2. The new Directions will come into force on December 1, 1928, and copies are now obtainable from H.M. Stationery Office, Adastral House, Kingsway, W.C.2, or through any bookseller, price 4d. net.

(No. 78 of 1928.)

Air Navigation: Abolition of the Terms "Port" and "Starboard"

As from the date of issue of this notice, the terms "port" and "starboard" will cease to be used in relation to civil aircraft. These terms will be replaced respectively by the terms "left" and "right," which will be used in all cases.

(No. 81 of 1928.)

IN PARLIAMENT

Royal Air Force Machines

SIR PHILIP SASOON, on December 3, in reply to Sir N. Gratton-Doyle, said no more wooden types are being brought into the service. It is considered that metal is a more workable and more economical material than wood. Its qualities can be widely varied and scientifically controlled. It lends itself to mass production, great durability and ease of maintenance; it is available in quantity, whereas timber of the high grade required has to be specially imported. Aircraft structures in metal are lighter, strength for strength, than wooden ones, are less affected by extremes of climate, and by their resilience and freedom from splintering reduce the risk to personnel if the machine should be involved in a crash.

Flying Boats, Damage

SIR S. HOARE, on December 5, in reply to Mr. Day, said the aircraft damaged at Portland in the gale of November 23 were three Royal Air Force flying boats. One of these, a wooden-hulled boat, parted from her moorings, was wrecked against the breakwater and was, he feared, a complete loss except for the engines, which had been salvaged and were being repaired. The other two, which are metal-hulled boats, collided with one another and sank, but their hulls and engines have been salvaged and are now also undergoing repair.

Royal Air Force Fatal Accidents

SIR S. HOARE, on December 6, in reply to Mr. Buxton, said, including accidents to personnel of the Special Reserve and of the Reserve and Auxiliary Air Force, the accident figures are: 43 fatal accidents in 1925, 54 in 1926, 40 in 1927, and 48 in 1928. The size of the Force and consequently the amount of flying done are, of course, increasing year by year.

Royal Air Force Club and Christmas

THE Royal Air Force Club will be closed from 2.30 p.m. on Thursday, December 27, until 12.30 p.m. on Friday, December 28, 1928 (for the purpose of holding the Annual Staff Dance), except in so far as affects bedroom accommodation (with breakfasts only) to residents and members who have engaged bedrooms prior to noon on December 27. The club will remain open during the Christmas holidays.

PERSONALS

Married

NORMAN STUART ALLINSON, R.A.F., was married on November 20, at Holy Trinity, Brompton, to FLORENCE MURIEL (BUNTY) HALL, only daughter of the late Mr. and Mrs. G. B. Hall, of Eastbourne.

The marriage took place on November 28, at St. Mark's, North Audley Street, of Mr. GEOFFREY EDWYN GIFFORD LYWOOD, R.A.F., youngest son of Col. Gifford Lywood and the late Mrs. Lywood, of The Malt House, Farringdon, Hants, and Miss JOAN EDITH HORDERN, only daughter of the Archdeacon of Lewes and Mrs. Hugh Horder, of Baldwyns, near East Grinstead, Sussex. Mr. Dermont Boyle R.A.F., was best man. A reception was held at 33, Bryanston Square (lent by Mrs. Hugh Horder).

The marriage of FLYING OFFICER ROBERT BAYNE BROWN, R.A.F. younger son of Mr. and Mrs. J. D. Brown, of Crooked Meadow, Ashted, Surrey, and KATHLEEN, youngest daughter of Mr. and Mrs. ROBERT CHARLES HAYWARD, Alton, Hampshire, took place at Holy Trinity Church, Sloane Street. Flying Officer O. D. Allerton was best man.

To be Married

A marriage has been arranged, and will take place on December 19, in Montreal, between MARTIN JOHN BERLYN, B.A., A.F.R.A.E.S., R.A.F., third son of Dr. J. A. and Mrs. Berlyn, of Edgbaston, and KATHLEEN MARY, younger daughter of Mrs. ALICE M. ROBERTS, of Blackgrove, Blindley Heath, Surrey.

Item

The will of SQUAD-LEADER WALTER HENRY PARK, M.C., D.F.C., of Parkhurst, Hawkinge, Kent, who died on October 19 at the Shorncliffe Military Hospital, has been proved at £2,561.

NEW COMPANIES REGISTERED

DESOUTTER AIRCRAFT COMPANY, LTD. Capital £21,150, in 20,000 10 per cent. cumulative preference shares of £1 each, and 23,000 ordinary shares of 1s. each. Objects: To acquire licences to manufacture and sell in the British Empire and Southern Ireland and to thoroughly exploit inventions and designs of aeroplanes; to manufacture, dispose of and exhibit all types of aircraft and aircraft engines, etc. First directors: M. L. Bramson and M. Desoutter (chairman). Solicitors: Wingfields, Halse and Trustram, 61, Cheapside, E.C.2.

DOMINION AIRCRAFT, LTD., 3, Liverpool Gardens, Worthing. Capital £1,500, in £1 shares. Acquiring the business of a civil aircraft pilot carried on by J. C. Don, aeroplane manufacturers, carriers of passengers, &c. First directors: J. C. Don, F. S. Miles and Mrs. E. Don.

IMPROVED GEARS, LTD., 404/406, Abbey House, Victoria Street, S.W. 1. Capital £10,000, in £1 shares. Objects: To acquire patents relating to inventions for improved epicyclic gears and inventions for improvements relating to brakes for controlling rotary motion, belonging to W. G. Wilson. Joint governing directors: W. G. Wilson (vice-chairman) and J. D. Siddeley (chairman).

IRISH AERO CLUB, LTD. Objects to take over and assume all or any of the assets, rights and liabilities of the Irish Aero Club, and to conduct a club or clubs for the furtherance of civil navigation. Directors: W. A. Armstrong, F. M. Summerfield, Dr. O. St. J. Gogarty, Col. J. C. Fitzmaurice, Col. C. F. Russell, O. G. Esmonde, F. Fitzpatrick, J. J. Reddy, M. P. Rowan and M. McDunphy. Solicitors: Arthur Cox and Co., 42/3, Stephen's Green, Dublin.

IRISH AIRWAYS, LTD. Capital £100, in £1 shares. Objects: to establish maintain and work lines of aerial conveyances between such places in Ireland as may be from time to time selected by the company. Solicitors: Arthur Cox and Co., 40/43, Stephen's Green, Dublin.

VANE'S ENGINES, LTD. Capital, £100, in 10s. shares. Acquiring all the interests of F. B. Vane in his patent application and provisional specification No. 32753, in his internal-combustion engine, and to carry on the business of general engineers, motor car and cycle makers, and dealers, aeroplane makers etc. Directors: F. B. Vane (address not stated) and R. T. Morgan, 129, Minories, E. 1.

AERONAUTICAL PATENT SPECIFICATIONS

(Abbreviations: Cyl. = cylinder; i.c. = internal combustion; m. = motor. The numbers in brackets are those under which the Specifications will be printed and abridged, etc.)

APPLIED FOR IN 1927

Published December 13, 1928

- 21,708. SIR W. G. ARMSTRONG, WHITWORTH AND CO., LTD., and C. BRERETON. Airship-mooring towers. (300,681.)
21,709. SIR W. G. ARMSTRONG, WHITWORTH AND CO., LTD., and C. BRERETON. Airship-mooring towers. (300,682.)
21,750. H. R. RICARDO, L.C. engines. (300,686.)
26,173. BLACKBURN AEROPLANE AND MOTOR CO., LTD., and R. R. RHODES. Portable huts. (300,752.)
30,157. A. W. DAW. Rotary i.c. engine. (300,784.)

Secret Patents Re-assigned to the Inventor

APPLIED FOR IN 1925

Published December 13, 1928

- 10,877. A. S. FLETCHER. Aerial warfare. (300,218.)

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